

**Organism list not requested in this search**

## BIOLOGICAL ACTIVITIES ISOLATED FOR XANTHOTHUMOL%

### XANTHOTHUMOL (FLAVONOID)

#### ACETANILIDE 4-HYDROXYLASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* IC50 31.4 MICROMOLS/ACTIVE \* L10219 \* VS.CDNA-EXPRESSED HUMAN CYP1A2.

#### ADIPOCYTE CONVERSION INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONCENTRATION VARIABLE NOT STATED ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30201 \*

#### AFLATOXIN B1 METABOLISM INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED NOT STATED ACTIVE \* L10219 \* VS.CDNA-EXPRESSED HUMAN P450 CYP1A2-METABOLISM OF AFB1.

#### ALKALINE PHOSPHATASE STIMULATION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 10.0N MOL/INACTIVE \* L04448 \* VS.HUMAN ENDOMETRIAL CELLS, ISHIKAWA VAR I.

#### ALKALINE PHOSPHATASE STIMULATION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONCENTRATION VARIABLE NOT STATED ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30229 \* IN HUMAN FETAL OSTEOBLAST CELL LINE HFOB/ER

#### ANTIANGIOGENIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 5.0 MICROMOLS/ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30198 \* VS.KS-IMM CELLS.

#### ANTIBACTERIAL ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* AGAR PLATE \* MIC 12.5 MCG/ML \* ACTIVE \* STREPTOCOCCUS SPECIES \* L26307 \*

## BIOLOGICAL ACTIVITIES ISOLATED FOR XANTHOTHUMOL%

### XANTHOTHUMOL (FLAVONOID)

#### ANTICOCCIDIAL ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONCENTRATION VARIABLE NOT STATED ACTIVE \* EIMARIA MAXIMA \*  
SEE ARTICLE FOR OTHER TEST RESULTS. \* L30197 \*

#### ANTICOCCIDIAL ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VIVO \* IN RATION \* CHICKEN \* CONC USED 20.0 PPM/ACTIVE \* EIMERIA TENELLA \* L30197 \*

#### ANTICOCCIDIAL ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VIVO \* IN RATION \* CHICKEN \* CONC USED 20.0 PPM/ACTIVE \* EIMARIA MAXIMA \* L30197 \*

#### ANTICOCCIDIAL ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VIVO \* IN RATION \* CHICKEN \* CONC USED 20.0 PPM/ACTIVE \* EIMERIA ACERVULINA \* L30197 \*

#### ANTICYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 5.0 MICROMOLS/ACTIVE \* HEPATOCYTES \* L15429 \* VS.TBH-  
INDUCED CYTOTOXICITY.

#### ANTIHYPERLIPEMIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VIVO \* IN RATION \* MOUSE \* DOSE 1.0 % OF DIET/ACTIVE \* SEE ARTICLE FOR OTHER TEST  
RESULTS. \* L30228 \* VS. PLASMA AND HEPATIC TRIGLYCERIDE LEVELS. 31 DAYS DOSING

#### ANTIINVASIVE ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 5.0 MICROMOLS/ACTIVE \* SEE ARTICLE FOR OTHER TEST  
RESULTS. \* L30199 \* VS. MCF-7 AND T47-D BREAST CANCER CELL LINES.

#### ANTIMALARIAL ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* IC50 1.0 MCG/ML \* ACTIVE \* PLASMODIUM FALCIPARUM \* L25890 \*

#### ANTIMALARIAL ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* IC50 8.2 MICROMOLS/ACTIVE \* PLASMODIUM FALCIPARUM \* SEE ARTICLE FOR OTHER  
TEST RESULTS. \* L30185 \*

## BIOLOGICAL ACTIVITIES ISOLATED FOR XANTHOTHUMOL%

### XANTHOTHUMOL (FLAVONOID)

#### ANTIMUTAGENIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 2.0 MICROMOLS/ACTIVE \* L27371 \* 48% INHIBITION INDUCED B IQ.

#### ANTIMUTAGENIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 0.1 MILLIMOLS/ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30335 \* VS. SEVERAL MUTAGENIC CHALLENGES IN HEP-G-2-CELLS.

#### ANTIMUTAGENIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* AGAR PLATE \* CONCENTRATION NOT GIVEN NOT STATED ACTIVE \* SALMONELLA TYPHIMURIUM TA98 \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30636 \*

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 5.0 MICROMOLS/ACTIVE \* L10217 \* VS.TBARS FORMATION IN LDL.

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 5.0 MICROMOLS/ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L27366 \*

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 5.0 MICROMOLS/ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L27366 \*

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 0.1 MG/ML \* WEAK ACTIVITY \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L27368 \* VS.LIPID PEROXIDATION INDUCED BY SIN-1 IN LDL. 24% INHIBITION.

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 200.0 MICROMOLS/WEAK ACTIVITY \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L29296 \* VS. DPPH ASSAY

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 10.2 MICROMOLS/ACTIVE \* VS.INHIBITION OF 1-1-DIPHENYL-2-PICRYLHYDRAZYL RADICAL FORMATION. \* L30193 \*

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 10.2 MICROMOLS/ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30193 \*

## BIOLOGICAL ACTIVITIES ISOLATED FOR XANTHOTHUMOL%

### XANTHOTHUMOL (FLAVONOID)

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 30.0 MICROMOLS/ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30335 \* VS. DPPH ASSAY.

#### ANTIPROLIFERATION ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 3.47 MICROMOLS/ACTIVE \* CA-MAMMARY-MCF-7 \* L03979 \*

#### ANTIPROLIFERATION ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED NOT STATED INACTIVE \* HUMAN COLON CANCER CELL LINE HT29 \* L03979 \*

#### ANTIPROLIFERATION ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 0.52 MICROMOLS/ACTIVE \* CA-HUMAN-OVARIAN A2780 \* L03979 \*

#### ANTIPROLIFERATION ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 10.0 MICROMOLS/ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L29422 \* USING MTT ASSAY IN BENIGN PROSTATIC HYPERPLASIA AND ANDROGEN INDEPENDENT PROSTATE CANCER CELL LINES

#### ANTIPROLIFERATION ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* IC50 13.2 MICROMOLS/ACTIVE \* CA-PC3(PROSTATE) \* L30466 \*

#### ANTIPROLIFERATION ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* IC50 12.3 MICROMOLS/CA-HUMAN-PROSTATE-DU 145 \* L30466 \*

## BIOLOGICAL ACTIVITIES ISOLATED FOR XANTHOHUMOL%

### XANTHOHUMOL (FLAVONOID)

#### ANTIVIRAL ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 1.7 MCG/ML \* ACTIVE \* VIRUS-BOVINE VIRAL DIARRHEA(BVDV) \* L25902 \*

#### ANTIVIRAL ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 2.5 MCG/ML \* ACTIVE \* VIRUS-CYTOMEGALOVIRUS \* L25902 \*

#### ANTIVIRAL ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 2.7 MCG/ML \* ACTIVE \* VIRUS-HERPES SIMPLEX 1 \* L25902 \*

#### ANTIVIRAL ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 1.5 MCG/ML \* ACTIVE \* VIRUS-HERPES SIMPLEX 2 \* L25902 \*

#### ANTIVIRAL ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED NOT STATED INACTIVE \* VIRUS-RHINOVIRUS \* L25902 \*

#### ANTIVIRAL ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 0.82 MCG/ML \* ACTIVE \* VIRUS-HIV-1 \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30188 \*

#### APOPTOSIS INDUCTION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 1.0 MCG/ML \* ACTIVE \* LEUK-HL60 \* DATA INCOMPLETE - DERIVED FROM AN ABSTRACT. \* L19788 \*

#### APOPTOSIS INDUCTION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 2.6 MICROMOLS/ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L26906 \* VS.40-16 HUMAN COLON CANCER CELLS.

#### APOPTOSIS INDUCTION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 10.0 MICROMOLS/ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L29422 \* USING ANNEXIN V ASSAY IN HUMAN BENIGN PROSTATIC HYPERPLASIA (BPH-1) EPITHELIAL AND ANDROGEN INDEPENDENT PROSTATE CANCER CELL LINES

## BIOLOGICAL ACTIVITIES ISOLATED FOR XANTHOHUMOL%

### XANTHOHUMOL (FLAVONOID)

#### APOPTOSIS INDUCTION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 75.0 MICROMOLS/ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30201 \* VS.3T3-L-1 FIBROBLASTS.

#### AROMATASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 3.2 MICROMOLS/ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30162 \* VS. BREAST CANCER CELLS SK-BR-3

#### AROMATASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 20.3 MICROMOLS/ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30195 \* VS.JAR CELLS.

#### BINDING EFFECT

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONCENTRATION VARIABLE NOT STATED ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30191 \* BINDING TO CYTOSOLIC PROTEINS IN CACO-2 CELLS MAY CONTRIBUTE TO THE POOR BIOAVAILABILITY OF XANTHOHUMOL.

#### CARCINOGENESIS INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* NOT STATED ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30218 \* USING AN ONLINE LC/MS SCREENING ASSAY BASED ON THE MASS SPECTROMETRIC IDENTIFICATION OF COMPOUNDS THAT ALKYLATE THE CYTOPLASMIC ACTIN-BINDING KEAP1 PROTEIN, LEADING TO THE UPREGULATION OF ANTIOXIDANT RESPONSE ELEMENT-MEDIATED INDUCTION OF PHASE II DETOXIFYING AND ANTIOXIDATIVE STRESS ENZYME NRF2

#### CARCINOGENESIS INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* MOUSE \* IC50 0.02 MICROMOLS/ACTIVE \* VS.FORMALIN-INDUCED PEDAL EDEMA. \* L30258 \* VS. INCIDENCE OF DMBA-INDUCED LESIONS IN MOUSE MAMMARY ORGAN CULTURE

#### CARCINOGENESIS INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* MOUSE \* IC50 0.02 MICROMOLS/ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30258 \* VS. INCIDENCE OF DMBA-INDUCED LESIONS IN MOUSE MAMMARY ORGAN CULTURE

#### CASPASE-3 STIMULATION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 200 MICROMOLS/INACTIVE \* CA-HUMAN-PROSTATE PC-3 \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30253 \*

#### CELL PROLIFERATION STIMULATION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONCENTRATION VARIABLE NOT STATED ACTIVE \* CA-HUMAN-BREAST-MCF-7 \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30229 \*

## BIOLOGICAL ACTIVITIES ISOLATED FOR XANTHOTHUMOL%

### XANTHOTHUMOL (FLAVONOID)

#### CHLORZOAZONE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 10.0 MICROMOLS/INACTIVE \* L10219 \* VS.CDNA-EXPRESSED HUMAN CYP2E1.

#### COLONY FORMATION INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 30.0 MCG/ML \* ACTIVE \* CELLS-HAMSTER-CHINESE-V79 \*  
SEE ARTICLE FOR OTHER TEST RESULTS. \* L30229 \* SEVEN DAY INCUBATION

#### CYSTEINE PROTEASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED NOT STATED ACTIVE \* DATA INCOMPLETE - DERIVED FROM AN ABSTRACT. \*  
L19788 \*

#### CYTOCHROME P450 STIMULATION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 10.2 MICROMOLS/ACTIVE \* L27371 \* VS.HUMAN CYP-1-A-2.

#### CYTOPROTECTIVE ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 10 MCG/ML \* ACTIVE \* CA-HEPATOCARCINOMA-G2 \* SEE  
ARTICLE FOR OTHER TEST RESULTS. \* L30636 \* VS. 2-AMINO-3-METHYLIMIDAZO[4,5-F] QUINOLINE INDUCED DNA DAMAGE

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 100.0 MICROMOLS/WEAK ACTIVITY \* CA-MAMMARY-MCF-7 \*  
L03979 \*

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 100.0 MICROMOLS/WEAK ACTIVITY \* HUMAN COLON  
CANCER CELL LINE HT29 \* L03979 \*

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 100.0 MICROMOLS/WEAK ACTIVITY \* CA-HUMAN-OVARIAN  
A2780 \* L03979 \*

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 24.4 MICROMOLS/ACTIVE \* SEE ARTICLE FOR OTHER TEST  
RESULTS. \* L26907 \* VS.B-CHRONIC LYMPHOCYTIC LEUKEMIA CELLS.

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 30.7 MICROMOLS/EQUIVOCAL \* HEPATOMA-HEPA-1C1C7 \* SEE  
ARTICLE FOR OTHER TEST RESULTS. \* L30193 \*



## BIOLOGICAL ACTIVITIES ISOLATED FOR XANTHOTHUMOL%

### XANTHOTHUMOL (FLAVONOID)

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 200 MICROMOLS/ACTIVE \* HUMAN PROSTATE CANCER CELL LINE DU-145 \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30253 \*

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 200 MICROMOLS/ACTIVE \* CA-HUMAN-PROSTATE PC-3 \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30253 \*

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 10 MCG/ML \* EQUIVOCAL \* CA-HEPATOCARCINOMA-G2 \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30636 \*

#### DIACYLGLYCEROL ACYLTRANSFERASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* RAT \* IC50 50.3 MICROMOLS/ACTIVE \* MICROSOMES-RAT-LIVER \* H20962 \*

#### DIACYLGLYCEROL ACYLTRANSFERASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 21.2 MICROMOLS/ACTIVE \* CELLS-RAJI \* H20962 \*

#### DNA FRAGMENTATION INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 100.0 MCG/ML \* WEAK ACTIVITY \* LEUK-HL60 \* DATA INCOMPLETE - DERIVED FROM AN ABSTRACT. \* L19788 \*

#### DNA POLYMERASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 23.0 MICROMOLS/ACTIVE \* HUMAN BREAST CANCER CELL LINE MDA-MB-435 \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30258 \*

## BIOLOGICAL ACTIVITIES ISOLATED FOR XANTHOTHUMOL%

### XANTHOTHUMOL (FLAVONOID)

#### DNA SYNTHESIS INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 0.5 MICROMOLS/ACTIVE \* CA-MAMMARY-MCF-7 \* L03979 \*

#### DRUG METABOLIZING ENZYME INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 0.022 MICROMOLS/ACTIVE \* HEPATOMA-H4IIEC3/G \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30258 \* VS INHIBITION OF CYP1A, A PHASE I (CONJUGATING) ENZYME

#### ESTROGENIC EFFECT

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED NOT STATED INACTIVE \* L14681 \* IN ISHIKAWA CELLS.

#### ESTROGENIC EFFECT

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONCENTRATION VARIABLE NOT STATED INACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L27370 \* VS. ER-ALPHA AND ER-BETA.

#### ESTROGENIC EFFECT

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 10.0 MCG/ML \* ACTIVE \* OSTEOSARCOMA-U-2 OS \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30229 \* VS. REGULATION OF ESTROGEN-INDUCIBLE GENE EXPRESSION

#### ETHOXYRESORUFIN-O-DEETHYLASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 10.0 MICROMOLS/ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L10219 \* VS.HUMAN P450 CYP1B1 AND HUMAN P450 CYP1A1.

#### FERTILITY PROMOTION EFFECT

PHARMACOLOGY OF COMPOUND - IN VIVO \* INTRAGASTRIC \* RAT \* DOSE 100.0 MG/KG \* INACTIVE \* L26909 \*

#### GABA RECEPTOR BINDING STIMULATION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 75.0 NANOMOLS/ACTIVE \* NEURON \* L30576 \* IN HIPPOCAMPAL NEURONS.

#### GABA RECEPTOR MODULATORY EFFECT

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 75.0 NANOMOLS/STRONG ACTIVITY \* CELLS-HIPPOCAMPAL NEURON \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30230 \*

## BIOLOGICAL ACTIVITIES ISOLATED FOR XANTHOTHUMOL%

### XANTHOTHUMOL (FLAVONOID)

#### GENOTOXICITY INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 0.001 MICROMOLS/ACTIVE \* LIVER \* L30577 \* VS-IQ AND BAP-INDUCED DNA DAMAGE.

#### HYPERPROTHROMBINEMIA EFFECT

PHARMACOLOGY OF COMPOUND - IN VIVO \* SC \* MOUSE \* DOSE 5.0 MICROMOLS/ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30198 \*

#### IODIDE UPTAKE STIMULATION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONCENTRATION VARIABLE NOT STATED ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L27089 \* IN RAT THYROID-DERIVED FRTL-5 CELLS

#### LDL OXIDATION INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 5.0 MICROMOLS/ACTIVE \* L10217 \* VS.CONJUGATED DIENE FORMATION IN LDL.

#### LIPID PEROXIDE FORMATION INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* IC50 6.0 MICROMOLS/ACTIVE \* MICROSOMES-RAT-LIVER \* L15429 \* VS.FERROUS SULFATE INDUCED LIPID PEROXIDATION.

#### LIPID PEROXIDE FORMATION INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 5.0 MICROMOLS/ACTIVE \* MICROSOMES-RAT-LIVER \* L15429 \* VS.FE3+-ADP/NADPH INDUCED LIPID PEROXIDATION.

#### LIPID PEROXIDE FORMATION INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 5.0 MICROMOLS/ACTIVE \* MICROSOMES-RAT-LIVER \* L15429 \* VS.TERT-BUTYL HYDROPEROXIDE INDUCED LIPID PEROXIDATION.

#### METABOLISM OF

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED NOT STATED ACTIVE \* L08929 \* METABOLISM TO ISOXANTHOTHUMOL.

#### METABOLISM OF

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED VAR ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L26905 \* THE STUDY SUGGESTED A PROMINENT ROLE FOR THE GLUCURONIDATION AND SULFATION OF XN IN THE LIVER AS WELL AS IN THE GASTROINTESTINAL TRACT.

## BIOLOGICAL ACTIVITIES ISOLATED FOR XANTHOTHUMOL%

### XANTHOTHUMOL (FLAVONOID)

#### METABOLISM OF

PHARMACOLOGY OF COMPOUND - IN VIVO \* INTRAGASTRIC \* RAT \* DOSE 1000 MG/KG \* ACTIVE \* L27032 \* 16 METABOLITES AND 6 PREVIOUSLY KNOWN METABOLITES WERE ISLOATED.

#### METABOLISM OF

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONCENTRATION VARIABLE NOT STATED ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L27365 \* METABOLIZED TO TWO MAJOR GLUCURONIDES BY RAT AND HUMAN MICROSOMES

#### METABOLISM OF

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONCENTRATION VARIABLE NOT STATED ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L27367 \* CONVERSION TO CHALCONE DERIVATIVES BY RAT LIVER MICROSOMES.

#### METABOLISM OF

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONCENTRATION VARIABLE NOT STATED ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L29205 \* METABOLIZED TO ISOXANTHOTHUMOL.

#### METABOLISM STIMULATION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 10.0 MICROMOLS/ACTIVE \* CA-HEPATOCARCINOMA-G2 \* L30228 \* VS. ACTIVATION OF FARNESOID RECEPTOR X AND MODULATION OF GENES INVOLVED IN LIPID AND GLUCOSE METABOLISM

#### MISCELLANEOUS EFFECTS

PHARMACOLOGY OF COMPOUND - IN VIVO \* INTRAGASTRIC \* RAT \* DOSE 100.0 MG/KG \* INACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L26908 \* VS.COMPOSITION OF INTESTINAL MICROBIOTA.

#### NIFEDIPINE OXIDASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 10.0 MICROMOLS/INACTIVE \* L10219 \* VS.CDNA-EXPRESSED HUMAN P450 CYP1A2-METABOLISM OF AFB1.

#### NITRIC OXIDE RELEASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 5.0 MCG/ML \* ACTIVE \* MACROPHAGE CELL LINE RAW 264.7 \* H31111 \* VS.LPS/INF-GAMMA INDUCED NO.

#### NITRIC OXIDE SYNTHESIS INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* IC50 8.3 MICROMOLS/ACTIVE \* MACROPHAGE CELL LINE RAW 264.7 \* H32723 \*

#### NUCLEAR FACTOR KAPPA-BETA INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 10.0 MICROMOLS/ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L29422 \* IN HUMAN BENIGN PROSTATIC HYPERPLASIA EPITHELIAL (BPH-1) CELLS

## BIOLOGICAL ACTIVITIES ISOLATED FOR XANTHOTHUMOL%

### XANTHOTHUMOL (FLAVONOID)

#### PHASE II ENZYME INDUCTION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 1.7 MICROMOLS/ACTIVE \* HEPATOMA-HEPA-1C1C7 \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30258 \* CONCENTRATION REQUIRED TO DOUBLE QUINONE REDUCTASE ACTIVITY

#### QUINONE REDUCTASE INDUCTION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CD50 2.1 MICROMOLS/ACTIVE \* L27369 \*

#### QUINONE REDUCTASE INDUCTION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 1.7 MICROMOLS/ACTIVE \* HEPATOMA-HEPA-1C1C7 \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30193 \*

#### QUINONE REDUCTASE INDUCTION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 2.0 MCG/ML \* ACTIVE \* HEPATOMA-HEPA-1C1C7 \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30218 \* ASSAY USED TO DETERMINE THE CONCENTRATION REQUIRED TO DOUBLE QUINONE REDUCTASE ACTIVITY.

#### QUINONE REDUCTASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* ED50 1.7 MICROMOLS/ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L29296 \*

#### RADICAL SCAVENGING EFFECT

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 1.0 MICROMOLS/ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30258 \*

#### REVERSE TRANSCRIPTASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 1.28 MCG/ML \* ACTIVE \* VIRUS-HIV-1 \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30188 \*

## BIOLOGICAL ACTIVITIES ISOLATED FOR XANTHOTHUMOL%

### XANTHOTHUMOL (FLAVONOID)

#### TOXIC EFFECT(GENERAL)

PHARMACOLOGY OF COMPOUND - IN VIVO \* INTRAGASTRIC \* RAT \* DOSE 1000 MG/KG \* ACTIVE \* L26909 \*

### XANTHOTHUMOL B (FLAVONOID)

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 200.0 MICROMOLS/INACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L29296 \* VS.DPPH ASSAY

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 200.0 MICROMOLS/INACTIVE \* VS.INHIBITION OF 1-1-DIPHENYL-2-PICRYLHYDRAZYL RADICAL FORMATION. \* L30193 \*

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 200.0 MICROMOLS/INACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30193 \*

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 >20.0 MICROMOLS/INACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L29296 \* VS.HEP-C-2-ARE-C-8 CELLS

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 >20.0 MICROMOLS/INACTIVE \* HEPATOMA-HEPA-1C1C7 \* THE CORRECT IDENTIFICATION OF THIS PLANT IS HIGHLY QUESTIONABLE. \* L30193 \*

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 >20.0 MICROMOLS/INACTIVE \* HEPATOMA-HEPA-1C1C7 \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30193 \*

#### DIACYLGLYCEROL ACYLTRANSFERASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* RAT \* IC50 194.0 MICROMOLS/ACTIVE \* MICROSOMES-RAT-LIVER \* H20962 \*

#### DIACYLGLYCEROL ACYLTRANSFERASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 33.8 MICROMOLS/ACTIVE \* CELLS-RAJI \* H20962 \*

## BIOLOGICAL ACTIVITIES ISOLATED FOR XANTHOTHUMOL%

### XANTHOTHUMOL B (FLAVONOID)

#### NITRIC OXIDE RELEASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 1.0 MCG/ML \* ACTIVE \* MACROPHAGE CELL LINE RAW 264.7 \* H31111 \* VS.LPS/INF-GAMMA INDUCED NO.

#### NITRIC OXIDE SYNTHESIS INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* IC50 5.6 MICROMOLS/ACTIVE \* MACROPHAGE CELL LINE RAW 264.7 \* H32723 \*

#### QUINONE REDUCTASE INDUCTION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 4.5 MICROMOLS/WEAK ACTIVITY \* HEPATOMA-HEPA-1C1C7 \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30193 \*

#### QUINONE REDUCTASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* ED50 4.5 MICROMOLS/ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L29296 \*

### XANTHOTHUMOL B,DEMETHYL: (FLAVONOID)

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 200.0 MICROMOLS/WEAK ACTIVITY \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L29296 \* VS.DPPH ASSAY

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 200.0 MICROMOLS/INACTIVE \* VS.INHIBITION OF 1-1-DIPHENYL-2-PICRYLHYDRAZYL RADICAL FORMATION. \* L30193 \*

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 200.0 MICROMOLS/INACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30193 \*

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 >20.0 MICROMOLS/INACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L29296 \* VS.HEP-G-2-ARE-C-8 CELLS

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 >20.0 MICROMOLS/INACTIVE \* HEPATOMA-HEPA-1C1C7 \* THE CORRECT IDENTIFICATION OF THIS PLANT IS HIGHLY QUESTIONABLE. \* L30193 \*

## BIOLOGICAL ACTIVITIES ISOLATED FOR XANTHOTHUMOL%

### XANTHOTHUMOL B, DEMETHYL: (FLAVONOID)

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 >20.0 MICROMOLS/INACTIVE \* HEPATOMA-HEPA-1C1C7 \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30193 \*

#### QUINONE REDUCTASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* ED50 2.7 MICROMOLS/ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L29296 \*

### XANTHOTHUMOL C (FLAVONOID)

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 200.0 MICROMOLS/INACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L29296 \* VS. DPPH ASSAY

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 200.0 MICROMOLS/INACTIVE \* VS. INHIBITION OF 1-1-DIPHENYL-2-PICRYLHYDRAZYL RADICAL FORMATION. \* L30193 \*

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 200.0 MICROMOLS/INACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30193 \*

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 >20.0 MICROMOLS/INACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L29296 \* VS. HEP-G-2-ARE-C-8 CELLS

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 >20.0 MICROMOLS/INACTIVE \* HEPATOMA-HEPA-1C1C7 \* THE CORRECT IDENTIFICATION OF THIS PLANT IS HIGHLY QUESTIONABLE. \* L30193 \*

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 >20.0 MICROMOLS/INACTIVE \* HEPATOMA-HEPA-1C1C7 \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30193 \*

#### QUINONE REDUCTASE INDUCTION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 4.8 MICROMOLS/WEAK ACTIVITY \* HEPATOMA-HEPA-1C1C7 \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30193 \*



## BIOLOGICAL ACTIVITIES ISOLATED FOR XANTHOTHUMOL%

### XANTHOTHUMOL C (FLAVONOID)

#### QUINONE REDUCTASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* ED50 4.8 MICROMOLS/ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L29296 \*

### XANTHOTHUMOL D (FLAVONOID)

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 200.0 MICROMOLS/WEAK ACTIVITY \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L29296 \* VS.DPPH ASSAY

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 200.0 MICROMOLS/INACTIVE \* VS.INHIBITION OF 1-1-DIPHENYL-2-PICRYLHYDRAZYL RADICAL FORMATION. \* L30193 \*

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 200.0 MICROMOLS/INACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30193 \*

#### CARCINOGENESIS INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* NOT STATED ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30218 \* USING AN ONLINE LC/MS SCREENING ASSAY BASED ON THE MASS SPECTROMETRIC IDENTIFICATION OF COMPOUNDS THAT ALKYLATE THE CYTOPLASMIC ACTIN-BINDING KEAP1 PROTEIN, LEADING TO THE UPREGULATION OF ANTIOXIDANT RESPONSE ELEMENT-MEDIATED INDUCTION OF PHASE II DETOXYFYING AND ANTIOXIDATIVE STRESS ENZYME NRF2

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 >20.0 MICROMOLS/INACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L29296 \* VS.HEP-G-2-ARE-C-8 CELLS

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 >20.0 MICROMOLS/INACTIVE \* HEPATOMA-HEPA-1C1C7 \* THE CORRECT IDENTIFICATION OF THIS PLANT IS HIGHLY QUESTIONABLE. \* L30193 \*

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 >20.0 MICROMOLS/INACTIVE \* HEPATOMA-HEPA-1C1C7 \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30193 \*

#### NITRIC OXIDE RELEASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 5.0 MCG/ML \* ACTIVE \* MACROPHAGE CELL LINE RAW 264.7 \* H31111 \* VS.LPS/INF-GAMMA INDUCED NO.

## BIOLOGICAL ACTIVITIES ISOLATED FOR XANTHOTHUMOL%

### XANTHOTHUMOL D (FLAVONOID)

#### NITRIC OXIDE SYNTHESIS INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* IC50 9.4 MICROMOLS/ACTIVE \* MACROPHAGE CELL LINE RAW 264.7 \* H32723 \*

#### QUINONE REDUCTASE INDUCTION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 7.8 MICROMOLS/WEAK ACTIVITY \* HEPATOMA-HEPA-1C1C7 \*  
SEE ARTICLE FOR OTHER TEST RESULTS. \* L30193 \*

#### QUINONE REDUCTASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* ED50 7.4 MICROMOLS/ACTIVE \* SEE ARTICLE FOR OTHER TEST  
RESULTS. \* L29296 \*

### XANTHOTHUMOL G (FLAVONOID)

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 200.0 MICROMOLS/INACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \*  
L29296 \* VS.DPPH ASSAY

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 200.0 MICROMOLS/INACTIVE \* VS.INHIBITION OF 1-1-DIPHENYL-2-  
PICRYLHYDRAZYL RADICAL FORMATION. \* L30193 \*

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 200.0 MICROMOLS/INACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \*  
L30193 \*

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 >20.0 MICROMOLS/INACTIVE \* SEE ARTICLE FOR OTHER TEST  
RESULTS. \* L29296 \* VS.HEP-G-2-ARE-C-8 CELLS

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 >20.0 MICROMOLS/INACTIVE \* HEPATOMA-HEPA-1C1C7 \* THE  
CORRECT IDENTIFICATION OF THIS PLANT IS HIGHLY QUESTIONABLE. \* L30193 \*

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 >20.0 MICROMOLS/INACTIVE \* HEPATOMA-HEPA-1C1C7 \* SEE  
ARTICLE FOR OTHER TEST RESULTS. \* L30193 \*

## BIOLOGICAL ACTIVITIES ISOLATED FOR XANTHOSUMOL%

### XANTHOSUMOL G (FLAVONOID)

#### QUINONE REDUCTASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* ED50 4.5 MICROMOLS/ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L29296 \*

### XANTHOSUMOL H (FLAVONOID)

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 200.0 MICROMOLS/INACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L29296 \* VS.DPPH ASSAY

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 200.0 MICROMOLS/INACTIVE \* VS.INHIBITION OF 1-1-DIPHENYL-2-PICRYLHYDRAZYL RADICAL FORMATION. \* L30193 \*

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 200.0 MICROMOLS/INACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30193 \*

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 >20.0 MICROMOLS/INACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L29296 \* VS.HEP-G-2-ARE-C-8 CELLS

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 >20.0 MICROMOLS/INACTIVE \* HEPATOMA-HEPA-1C1C7 \* THE CORRECT IDENTIFICATION OF THIS PLANT IS HIGHLY QUESTIONABLE. \* L30193 \*

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 >20.0 MICROMOLS/INACTIVE \* HEPATOMA-HEPA-1C1C7 \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30193 \*

#### QUINONE REDUCTASE INDUCTION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 7.1 MICROMOLS/WEAK ACTIVITY \* HEPATOMA-HEPA-1C1C7 \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30193 \*

#### QUINONE REDUCTASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* ED50 7.1 MICROMOLS/ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L29296 \*

## BIOLOGICAL ACTIVITIES ISOLATED FOR XANTHOTHUMOL%

### XANTHOTHUMOL I (FLAVONOID)

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 200.0 MICROMOLS/INACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L29296 \* VS.DPPH ASSAY

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 200.0 MICROMOLS/INACTIVE \* VS.INHIBITION OF 1-1-DIPHENYL-2-PICRYLHYDRAZYL RADICAL FORMATION. \* L30193 \*

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 200.0 MICROMOLS/INACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30193 \*

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 >20.0 INACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L29296 \* VS.HEP-G-2-ARE-C-8 CELLS

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 >20.0 MICROMOLS/INACTIVE \* HEPATOMA-HEPA-1C1C7 \* THE CORRECT IDENTIFICATION OF THIS PLANT IS HIGHLY QUESTIONABLE. \* L30193 \*

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 >20.0 MICROMOLS/INACTIVE \* HEPATOMA-HEPA-1C1C7 \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30193 \*

#### QUINONE REDUCTASE INDUCTION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED >30.0 MICROMOLS/INACTIVE \* HEPATOMA-HEPA-1C1C7 \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30193 \*

#### QUINONE REDUCTASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* ED50 >20.0 MICROMOLS/INACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L29296 \*

### XANTHOTHUMOL J,DEMETHYL: (FLAVONOID)

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 200.0 MICROMOLS/WEAK ACTIVITY \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L29296 \* VS.DPPH ASSAY

## BIOLOGICAL ACTIVITIES ISOLATED FOR XANTHOTHUMOL%

### XANTHOTHUMOL J,DEMETHYL: (FLAVONOID)

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 200.0 MICROMOLS/INACTIVE \* VS.INHIBITION OF 1-1-DIPHENYL-2-PICRYLHYDRAZYL RADICAL FORMATION. \* L30193 \*

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 200.0 MICROMOLS/INACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30193 \*

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 >20.0 MICROMOLS/INACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L29296 \* VS.HEP-G-2-ARE-C-8 CELLS

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 >20.0 MICROMOLS/INACTIVE \* HEPATOMA-HEPA-1C1C7 \* THE CORRECT IDENTIFICATION OF THIS PLANT IS HIGHLY QUESTIONABLE. \* L30193 \*

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 >20.0 MICROMOLS/INACTIVE \* HEPATOMA-HEPA-1C1C7 \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30193 \*

#### QUINONE REDUCTASE INDUCTION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 7.8 MICROMOLS/ACTIVE \* HEPATOMA-HEPA-1C1C7 \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30193 \*

#### QUINONE REDUCTASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* ED50 7.8 MICROMOLS/ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L29296 \*

### XANTHOTHUMOL K,1"-2"-DIHYDROXY (FLAVONOID)

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 200.0 MICROMOLS/INACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L29296 \* VS.DPPH ASSAY

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 >20.0 MICROMOLS/INACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L29296 \* VS.HEP-G-2-ARE-C-8 CELLS

## BIOLOGICAL ACTIVITIES ISOLATED FOR XANTHOTHUMOL%

### XANTHOTHUMOL K,1"-2"-DIHYDROXY (FLAVONOID)

#### QUINONE REDUCTASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* ED50 2.5 MICROMOLS/ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L29296 \*

### XANTHOTHUMOL,2"-3"-DIHYDRO: (FLAVONOID)

#### ANTIMALARIAL ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* IC50 12.9 MICROMOLS/ACTIVE \* PLASMODIUM FALCIPARUM \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30185 \*

### XANTHOTHUMOL,4'-O-5'-C-DIPRENYL: (FLAVONOID)

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 0.1 MG/ML \* ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L27368 \*  
VS.LIPID PEROXIDATION INDUCED BY SIN-1 IN LDL. 88% INHIBITION.

### XANTHOTHUMOL,4'-O-5'-DIPRENYL: (FLAVONOID)

#### LIPID PEROXIDE FORMATION INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 5.0 MICROMOLS/ACTIVE \* MICROSOMES-RAT-LIVER \* L15429 \* VS.FERROUS SULFATE INDUCED LIPID PEROXIDATION.

#### LIPID PEROXIDE FORMATION INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 25.0 MICROMOLS/ACTIVE \* MICROSOMES-RAT-LIVER \* L15429 \* VS.FE3+-ADP/NADPH INDUCED LIPID PEROXIDATION.

#### LIPID PEROXIDE FORMATION INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 5.0 MICROMOLS/ACTIVE \* MICROSOMES-RAT-LIVER \* L15429 \* VS.TERT-BUTYL HYDROPEROXIDE INDUCED LIPID PEROXIDATION.

### XANTHOTHUMOL,4'-O-5'-DIPRENYL; (FLAVONOID)

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 5.0 MICROMOLS/ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L27366 \*

## BIOLOGICAL ACTIVITIES ISOLATED FOR XANTHOTHUMOL%

### XANTHOTHUMOL,4'-O-METHYL: (FLAVONOID)

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 5.0 MICROMOLS/ACTIVE \* L10217 \* VS.TBARS FORMATION IN LDL.

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 0.1 MG/ML \* ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L27368 \* VS.LIPID PEROXIDATION INDUCED BY SIN-1 IN LDL. 51% INHIBITION.

#### LDL OXIDATION INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 25.0 MICROMOLS/ACTIVE \* L10217 \* VS.CONJUGATED DIENE FORMATION IN LDL.

#### LIPID PEROXIDE FORMATION INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 5.0 MICROMOLS/ACTIVE \* MICROSOMES-RAT-LIVER \* L15429 \* VS.FERROUS SULFATE INDUCED LIPID PEROXIDATION.

#### LIPID PEROXIDE FORMATION INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 5.0 MICROMOLS/ACTIVE \* MICROSOMES-RAT-LIVER \* L15429 \* VS.FE3+-ADP/NADPH INDUCED LIPID PEROXIDATION.

#### LIPID PEROXIDE FORMATION INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 5.0 MICROMOLS/ACTIVE \* MICROSOMES-RAT-LIVER \* L15429 \* VS.TERT-BUTYL HYDROPEROXIDE INDUCED LIPID PEROXIDATION.

### XANTHOTHUMOL,4'-O-METHYL; (FLAVONOID)

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 5.0 MICROMOLS/ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L27366 \*

### XANTHOTHUMOL,5'-PRENYL: (FLAVONOID)

#### ACETANILIDE 4-HYDROXYLASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 10.0 MICROMOLS/ACTIVE \* L10219 \* VS.CDNA-EXPRESSED HUMAN CYP1A2.

## BIOLOGICAL ACTIVITIES ISOLATED FOR XANTHOTHUMOL%

### XANTHOTHUMOL,5'-PRENYL: (FLAVONOID)

#### ANTICYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 10.0 MICROMOLS/ACTIVE \* HEPATOCYTES \* L15429 \* VS.TBH-INDUCED CYTOTOXICITY.

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 5.0 MICROMOLS/ACTIVE \* L10217 \* VS.TBARS FORMATION IN LDL.

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 0.1 MG/ML \* WEAK ACTIVITY \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L27368 \* VS.LIPID PEROXIDATION INDUCED BY SIN-1 IN LDL. 31% INHIBITION.

#### CHLORZOXAZONE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 10.0 MICROMOLS/INACTIVE \* L10219 \* VS.CDNA-EXPRESSED HUMAN CYP2E1.

#### ETHOXYRESORUFIN-O-DEETHYLASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 10.0 MICROMOLS/ACTIVE \* L10219 \* VS.HUMAN P450 CYP1B1 AND HUMAN P450 CYP1A1.

#### LDL OXIDATION INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 5.0 MICROMOLS/INACTIVE \* L10217 \* VS.CONJUGATED DIENE FORMATION IN LDL.

#### LIPID PEROXIDE FORMATION INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* IC50 5.0 MICROMOLS/ACTIVE \* MICROSOMES-RAT-LIVER \* L15429 \* VS.FERROUS SULFATE INDUCED LIPID PEROXIDATION.

#### LIPID PEROXIDE FORMATION INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 5.0 MICROMOLS/ACTIVE \* MICROSOMES-RAT-LIVER \* L15429 \* VS.FE3+-ADP/NADPH INDUCED LIPID PEROXIDATION.

#### LIPID PEROXIDE FORMATION INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 5.0 MICROMOLS/ACTIVE \* MICROSOMES-RAT-LIVER \* L15429 \* VS.TERT-BUTYL HYDROPEROXIDE INDUCED LIPID PEROXIDATION.

#### NIFEDIPINE OXIDASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 10.0 MICROMOLS/INACTIVE \* L10219 \* VS.CDNA-EXPRESSED HUMAN P450 CYP1A2-METABOLISM OF AFB1.



## BIOLOGICAL ACTIVITIES ISOLATED FOR XANTHOTHUMOL%

### XANTHOTHUMOL,5'-PRENYL; (FLAVONOID)

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 5.0 MICROMOLS/ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L27366 \*

### XANTHOTHUMOL,5''-TRANS-HYDROXY: (FLAVONOID)

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 >20.0 MICROMOLS/INACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L29296 \* VS.HEP-G-2-ARE-C-8 CELLS

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 >20.0 MICROMOLS/INACTIVE \* HEPATOMA-HEPA-1C1C7 \* THE CORRECT IDENTIFICATION OF THIS PLANT IS HIGHLY QUESTIONABLE. \* L30193 \*

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 >20.0 MICROMOLS/INACTIVE \* HEPATOMA-HEPA-1C1C7 \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30193 \*

#### QUINONE REDUCTASE INDUCTION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 10.2 MICROMOLS/WEAK ACTIVITY \* HEPATOMA-HEPA-1C1C7 \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30193 \*

#### QUINONE REDUCTASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* ED50 10.2 MICROMOLS/ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L29296 \*

### XANTHOTHUMOL,6-8-DIPRENYL: (FLAVONOID)

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 200.0 MICROMOLS/INACTIVE \* VS.INHIBITION OF 1-1-DIPHENYL-2-PICRYLHYDRAZYL RADICAL FORMATION. \* L30193 \*

## BIOLOGICAL ACTIVITIES ISOLATED FOR XANTHOTHUMOL%

### XANTHOTHUMOL,6-8-DIPRENYL: (FLAVONOID)

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 200.0 MICROMOLS/INACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30193 \*

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 >20.0 MICROMOLS/INACTIVE \* HEPATOMA-HEPA-1C1C7 \* THE CORRECT IDENTIFICATION OF THIS PLANT IS HIGHLY QUESTIONABLE. \* L30193 \*

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 >20.0 MICROMOLS/INACTIVE \* HEPATOMA-HEPA-1C1C7 \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30193 \*

#### QUINONE REDUCTASE INDUCTION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 5.1 MICROMOLS/WEAK ACTIVITY \* HEPATOMA-HEPA-1C1C7 \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30193 \*

### XANTHOTHUMOL,6'-DEMETHYL: (FLAVONOID)

#### ANTIMALARIAL ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* IC50 42.4 MICROMOLS/WEAK ACTIVITY \* PLASMODIUM FALCIPARUM \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30185 \*

### XANTHOTHUMOL,DEMETHYL: (FLAVONOID)

#### ANTICYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 10.0 MICROMOLS/INACTIVE \* HEPATOCYTES \* L15429 \* VS.TBH-INDUCED CYTOTOXICITY.

#### ANTIPROLIFERATION ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 100.0 MICROMOLS/WEAK ACTIVITY \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30184 \* VS.BJAB CELLS.

#### ANTIPROLIFERATION ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* IC50 49.9 MICROMOLS/ACTIVE \* CA-PC3(PROSTATE) \* L30466 \*

#### ANTIPROLIFERATION ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* IC50 53.8 MICROMOLS/ACTIVE \* CA-HUMAN-PROSTATE-DU 145 \* L30466 \*

## BIOLOGICAL ACTIVITIES ISOLATED FOR XANTHOTHUMOL%

### XANTHOTHUMOL,DEMETHYL: (FLAVONOID)

#### APOPTOSIS INDUCTION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 100.0 MICROMOLS/ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30184 \* VS.BJAB CELLS.

#### APOPTOSIS INDUCTION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 50.0 MICROMOLS/INACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30184 \* VS.BJAB CELLS.

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 100.0 MICROMOLS/INACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30184 \*

#### ESTROGENIC EFFECT

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED NOT STATED INACTIVE \* L14681 \* IN ISHIKAWA CELLS.

#### LIPID PEROXIDE FORMATION INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 5.0 MICROMOLS/ACTIVE \* MICROSOMES-RAT-LIVER \* L15429 \* VS.FERROUS SULFATE INDUCED LIPID PEROXIDATION.

#### LIPID PEROXIDE FORMATION INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 5.0 MICROMOLS/ACTIVE \* MICROSOMES-RAT-LIVER \* L15429 \* VS.FE3+-ADP/NADPH INDUCED LIPID PEROXIDATION.

#### LIPID PEROXIDE FORMATION INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 5.0 MICROMOLS/ACTIVE \* MICROSOMES-RAT-LIVER \* L15429 \* VS.TERT-BUTYL HYDROPEROXIDE INDUCED LIPID PEROXIDATION.

#### QUINONE REDUCTASE INDUCTION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CD50 7.5 MICROMOLS/ACTIVE \* L27369 \*

### XANTHOTHUMOL,DEMETHYL; (FLAVONOID)

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 5.0 MICROMOLS/ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L27366 \*

## BIOLOGICAL ACTIVITIES ISOLATED FOR XANTHOTHUMOL%

### XANTHOTHUMOL,DIHYDRO: (FLAVONOID)

NITRIC OXIDE SYNTHESIS INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* IC50 23.0 MICROMOLS/ACTIVE \* MACROPHAGE CELL LINE RAW 264.7 \* H32723 \*

### XANTHOTHUMOL,DIHYDROXY: (FLAVONOID)

NITRIC OXIDE RELEASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 10.0 MCG/ML \* ACTIVE \* MACROPHAGE CELL LINE RAW 264.7 \* H31111 \* VS.LPS/INF-GAMMA INDUCED NO.

### XANTHOTHUMOL,DIPRENYL: (FLAVONOID)

CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 >20.0 MICROMOLS/INACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L29296 \* VS.HEP-G-2-ARE-C-8 CELLS

QUINONE REDUCTASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* ED50 5.1 MICROMOLS/ACTIVE \* L29296 \*

### XANTHOTHUMOL,ISO: (FLAVANONE)

ACETANILIDE 4-HYDROXYLASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* IC50 4.5 MICROMOLS/ACTIVE \* L10219 \* VS.CDNA-EXPRESSED HUMAN CYP1A2.

ADIPOCYTE CONVERSION INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONCENTRATION VARIABLE NOT STATED ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30201 \*

AFLATOXIN B1 METABOLISM INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 25.0 MICROMOLS/ACTIVE \* L10219 \* VS.CDNA-EXPRESSED HUMAN P450 CYP1A2-METABOLISM OF AFB1.

ALKALINE PHOSPHATASE STIMULATION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONCENTRATION VARIABLE NOT STATED ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30229 \* IN HUMAN FETAL OSTEOBLAST CELL LINE HFOB/ER

ANTIMUTAGENIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 2.0 MICROMOLS/NOT POSSIBLE TO INTERPRET RESULTS \* L27371 \* 84% INHIBITION INDUCED BY IQ.

## BIOLOGICAL ACTIVITIES ISOLATED FOR XANTHOTHUMOL%

### XANTHOTHUMOL,ISO: (FLAVANONE)

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 25.0 MICROMOLS/ACTIVE \* L10217 \* VS.TBARS FORMATION IN LDL.

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 0.1 MG/ML \* ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L27368 \* VS.LIPID PEROXIDATION INDUCED BY SIN-1 IN LDL. 100% INHIBITION.

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 200.0 MICROMOLS/WEAK ACTIVITY \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L29296 \* VS.DPPH ASSAY

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 200.0 MICROMOLS/INACTIVE \* VS.INHIBITION OF 1-1-DIPHENYL-2-PICRYLHYDRAZYL RADICAL FORMATION. \* L30193 \*

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 200.0 MICROMOLS/INACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30193 \*

#### ANTIPROLIFERATION ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 4.69 MICROMOLS/ACTIVE \* CA-MAMMARY-MCF-7 \* L03979 \*

#### ANTIPROLIFERATION ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED NOT STATED INACTIVE \* HUMAN COLON CANCER CELL LINE HT29 \* L03979 \*

#### ANTIPROLIFERATION ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED NOT STATED WEAK ACTIVITY \* CA-HUMAN-OVARIAN A2780 \* L03979 \*

#### ANTIPROLIFERATION ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* IC50 45.2 MICROMOLS/ACTIVE \* CA-PC3(PROSTATE) \* L30466 \*

#### ANTIPROLIFERATION ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* IC50 47.4 MICROMOLS/ACTIVE \* CA-HUMAN-PROSTATE-DU 145 \* L30466 \*

## BIOLOGICAL ACTIVITIES ISOLATED FOR XANTHOTHUMOL%

### XANTHOTHUMOL,ISO: (FLAVANONE)

#### ANTIVIRAL ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED NOT STATED INACTIVE \* VIRUS-BOVINE VIRAL DIARRHEA (BVDV) \* L25902 \*

#### ANTIVIRAL ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 12.0 MCG/ML \* ACTIVE \* VIRUS-CYTOMEGALOVIRUS \* L25902 \*

#### ANTIVIRAL ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED NOT STATED INACTIVE \* VIRUS-HERPES SIMPLEX 1 \* L25902 \*

#### ANTIVIRAL ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 17.0 MG/ML \* ACTIVE \* VIRUS-HERPES SIMPLEX 2 \* L25902 \*

#### ANTIVIRAL ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 6.6 MCG/ML \* ACTIVE \* VIRUS-RHINOVIRUS \* L25902 \*

#### APOPTOSIS INDUCTION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONCENTRATION NOT GIVEN NOT STATED MICROMOLS/WEAK ACTIVITY \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30201 \* VS.3T3-L-1 FIBROBLASTS.

#### AROMATASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 25.4 MICROMOLS/ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30162 \* VS. BREAST CANCER CELLS SK-BR-3

## BIOLOGICAL ACTIVITIES ISOLATED FOR XANTHOTHUMOL%

### XANTHOTHUMOL,ISO: (FLAVANONE)

#### AROMATASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 139.7 MICROMOLS/WEAK ACTIVITY \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30195 \* VS.JAR CELLS.

#### CARCINOGENESIS INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* NOT STATED INACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30218 \* USING AN ONLINE LC/MS SCREENING ASSAY BASED ON THE MASS SPECTROMETRIC IDENTIFICATION OF COMPOUNDS THAT ALKYLATE THE CYTOPLASMIC ACTIN-BINDING KEAP1 PROTEIN, LEADING TO THE UPREGULATION OF ANTIOXIDANT RESPONSE ELEMENT-MEDIATED INDUCTION OF PHASE II DETOXIFYING AND ANTIOXIDATIVE STRESS ENZYME NRF2

#### CASPASE-3 STIMULATION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 200 MICROMOLS/INACTIVE \* CA-HUMAN-PROSTATE PC-3 \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30253 \*

#### CELL PROLIFERATION STIMULATION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONCENTRATION VARIABLE NOT STATED ACTIVE \* CA-HUMAN-BREAST-MCF-7 \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30229 \*

#### CHLORZOXAZONE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 10.0 MICROMOLS/INACTIVE \* L10219 \* VS.CDNA-EXPRESSED HUMAN CYP2E1.

#### COLONY FORMATION INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 30.0 MCG/ML \* ACTIVE \* CELLS-HAMSTER-CHINESE-V79 \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30229 \* SEVEN DAY INCUBATION

#### CYCLIC AMP PHOSPHODIESTERASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* IC50 >5.0 MILLIMOLS/INACTIVE \* M12709 \*

#### CYTOCHROME P450 INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 10.0 MICROMOLS/ACTIVE \* MICROSOMES-HUMAN-LIVER \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30215 \* ONLINE LC/MS ASSAY USED TO DETERMINE KINETICS OF PRENYL OXIDATION OF XANTHOTHUMOL IN A VARIETY OF P450 ENZYME ISOTYPES.

## BIOLOGICAL ACTIVITIES ISOLATED FOR XANTHOTHUMOL%

### XANTHOTHUMOL,ISO: (FLAVANONE)

#### CYTOCHROME P450 STIMULATION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 10.0 MICROMOLS/INACTIVE \* L27371 \* VS.HUMAN CYP-1-A-2.

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 100.0 MICROMOLS/WEAK ACTIVITY \* CA-MAMMARY-MCF-7 \* L03979 \*

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 100.0 MICROMOLS/WEAK ACTIVITY \* HUMAN COLON CANCER CELL LINE HT29 \* L03979 \*

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 100.0 MICROMOLS/WEAK ACTIVITY \* CA-HUMAN-OVARIAN A2780 \* L03979 \*

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 30.7 MICROMOLS/WEAK ACTIVITY \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L29296 \* VS.HEP-G-2-ARE-C-8 CELLS

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 >20.0 MICROMOLS/INACTIVE \* HEPATOMA-HEPA-1C1C7 \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30193 \*

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 200 MICROMOLS/ACTIVE \* HUMAN PROSTATE CANCER CELL LINE DU-145 \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30253 \*

#### CYTOTOXIC ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 200 MICROMOLS/ACTIVE \* CA-HUMAN-PROSTATE PC-3 \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30253 \*

### XANTHOTHUMOL,ISO: (FLAVONOID)

#### DNA POLYMERASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* IC50 100.0 MICROMOLS/INACTIVE \* HUMAN BREAST CANCER CELL LINE MDA-MB-435 \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30258 \*



## BIOLOGICAL ACTIVITIES ISOLATED FOR XANTHOTHUMOL%

### XANTHOTHUMOL,ISO: (FLAVANONE)

#### DNA SYNTHESIS INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 0.5 MICROMOLS/ACTIVE \* CA-MAMMARY-MCF-7 \* L03979 \*

### XANTHOTHUMOL,ISO: (FLAVONOID)

#### DRUG METABOLIZING ENZYME INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 0.3 MICROMOLS/ACTIVE \* HEPATOMA-H4IIEC3/G \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30258 \* VS INHIBITION OF CYP1A, A PHASE I (CONJUGATING) ENZYME

### XANTHOTHUMOL,ISO: (FLAVANONE)

#### ESTROGENIC EFFECT

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 10.0 MCG/ML \* ACTIVE \* OSTEOSARCOMA-U-2 OS \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30229 \* VS. REGULATION OF ESTROGEN-INDUCIBLE GENE EXPRESSION

#### ETHOXYRESORUFIN-O-DEETHYLASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 10.0 MICROMOLS/ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L10219 \* VS.HUMAN P450 CYP1B1 AND HUMAN P450 CYP1A1.

#### LDL OXIDATION INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 5.0 MICROMOLS/INACTIVE \* L10217 \* VS.CONJUGATED DIENE FORMATION IN LDL.

#### METABOLISM OF

PHARMACOLOGY OF COMPOUND - IN HUMANS \* ORAL \* HUMAN ADULT \* DOSE 5.59 MG/DAY \* ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* E02273 \* DAILY DOSING FOR FOUR DAYS (3 WOMEN) WITH CONVERSION TO 8-PRENYL NARINGENIN. THIS OCCURS IN THE DISTAL COLON.

#### METABOLISM OF

PHARMACOLOGY OF COMPOUND - IN VITRO \* AGAR PLATE \* CONCENTRATION NOT GIVEN NOT STATED SEE ARTICLE FOR OTHER TEST RESULTS. \* E02286 \* STANDARDIZED EXTRACTS WERE INCUBATED WITH FECAL SLURRY FROM FEMALE HUMAN SUBJECTS (N=100) TO DETERMINE VARIATION IN METABOLIC PATTERNS AND BACTERIAL CONVERSION RATES.

#### METABOLISM OF

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONCENTRATION VARIABLE NOT STATED ACTIVE \* L28323 \* EUBACTERIUM LIMOSUM FROM FECAL FLORA METABOLIZED ISOXANTHOTHUMOL TO 8-PRENARINGENIN IN 90% YIELD.

## BIOLOGICAL ACTIVITIES ISOLATED FOR XANTHOTHUMOL%

### XANTHOTHUMOL,ISO: (FLAVANONE)

#### METABOLISM OF

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONCENTRATION VARIABLE NOT STATED ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L29205 \* METABOLIZED TO HYDROXYLATION OF THE PRENYL GROUP.

#### METABOLISM OF

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 10.0 MICROMOLS/. \* MICROSOMES-HUMAN-LIVER \* L30574 \* METABOLISM BY CYTOCHROME P450 ENZYME CYP1A2.

#### NIFEDIPINE OXIDASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 10.0 MICROMOLS/INACTIVE \* L10219 \* VS.CDNA-EXPRESSED HUMAN P450 CYP1A2-METABOLISM OF AFB1.

### XANTHOTHUMOL,ISO: (FLAVONOID)

#### PHASE II ENZYME INDUCTION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 6.5 MICROMOLS/ACTIVE \* HEPATOMA-HEPA-1C1C7 \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30258 \* CONCENTRATION REQUIRED TO DOUBLE QUINONE REDUCTASE ACTIVITY

### XANTHOTHUMOL,ISO: (FLAVANONE)

#### QUINONE REDUCTASE INDUCTION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED >50.0 MICROMOLS/INACTIVE \* HEPATOMA-HEPA-1C1C7 \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30193 \*

#### QUINONE REDUCTASE INDUCTION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED <50.0 MCG/ML \* INACTIVE \* HEPATOMA-HEPA-1C1C7 \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30218 \* ASSAY USED TO DETERMINE THE CONCENTRATION REQUIRED TO DOUBLE QUINONE REDUCTASE ACTIVITY.

#### QUINONE REDUCTASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* ED50 >50.0 MICROMOLS/INACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L29296 \*

### XANTHOTHUMOL,ISO: (FLAVONOID)

#### RADICAL SCAVENGING EFFECT

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 1.0 MICROMOLS/ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L30258 \*

## BIOLOGICAL ACTIVITIES ISOLATED FOR XANTHOHUMOL%

### XANTHOHUMOL,TETRAHYDRO: (FLAVONOID)

#### ACETANILIDE 4-HYDROXYLASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 10.0 MICROMOLS/ACTIVE \* L10219 \* VS.CDNA-EXPRESSED HUMAN CYP1A2.

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 5.0 MICROMOLS/ACTIVE \* L10217 \* VS.TBARS FORMATION IN LDL.

#### CHLORZOAZONE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 10.0 MICROMOLS/INACTIVE \* L10219 \* VS.CDNA-EXPRESSED HUMAN CYP2E1.

#### ETHOXYRESORUFIN-O-DEETHYLASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 10.0 MICROMOLS/ACTIVE \* L10219 \* VS.HUMAN P450 CYP1B1 AND HUMAN P450 CYP1A1.

#### LDL OXIDATION INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 5.0 MICROMOLS/ACTIVE \* L10217 \* VS.CONJUGATED DIENE FORMATION IN LDL.

#### LIPID PEROXIDE FORMATION INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 5.0 MICROMOLS/ACTIVE \* MICROSOMES-RAT-LIVER \* L15429 \* VS.FERROUS SULFATE INDUCED LIPID PEROXIDATION.

#### LIPID PEROXIDE FORMATION INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 25.0 MICROMOLS/ACTIVE \* MICROSOMES-RAT-LIVER \* L15429 \* VS.FERROUS SULFATE INDUCED LIPID PEROXIDATION.

#### LIPID PEROXIDE FORMATION INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 25.0 MICROMOLS/ACTIVE \* MICROSOMES-RAT-LIVER \* L15429 \* VS.FE3+-ADP/NADPH INDUCED LIPID PEROXIDATION.

#### LIPID PEROXIDE FORMATION INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 5.0 MICROMOLS/ACTIVE \* MICROSOMES-RAT-LIVER \* L15429 \* VS.TERT-BUTYL HYDROPEROXIDE INDUCED LIPID PEROXIDATION.

#### NIFEDIPINE OXIDASE INHIBITION

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 10.0 MICROMOLS/INACTIVE \* L10219 \* VS.CDNA-EXPRESSED HUMAN P450 CYP1A2-METABOLISM OF AFB1.

## BIOLOGICAL ACTIVITIES ISOLATED FOR XANTHOTHUMOL%

### XANTHOTHUMOL,TETRAHYDROXY: (FLAVONOID)

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CONC USED 0.1 MG/ML \* ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L27368 \*  
VS.LIPID PEROXIDATION INDUCED BY SIN-1 IN LDL. 92% INHIBITION.

### XANTHOTHUMOL,TETRAHYDROXY; (FLAVONOID)

#### ANTIOXIDANT ACTIVITY

PHARMACOLOGY OF COMPOUND - IN VITRO \* CELL CULTURE \* CONC USED 5.0 MICROMOLS/ACTIVE \* SEE ARTICLE FOR OTHER TEST RESULTS. \* L27366 \*

## LITERATURE CITED

- E02273 THE PRENYLFLAVONOID ISOXANTHOSUMOL FROM HOPS (*HUMULUS IUPULUS* L.) IS ACTIVATED INTO THE POTENT PHYTOESTROGEN 8-PRENYLNARINGENIN IN VITRO AND IN THE HUMAN INTESTINE  
POSSEMIERS,S: BOLCA,S: GROOTAERT,C: HEYERICK,A: DECROSS,K: DHOOGHE,W: DE KEUKELEIRE,D: RABOT,S: VERSTRAETE,W: VAN DE WIELE,T:  
J NUTR (2006) 136 pp. 1862-1867 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
GHENT UNIVERSITY LABO MICROBIAL ECOLOGY TECHNOLOGY FACULTY BIOSCIENCE ENGINEERING GENT B-9000 BELGIUM
- E02286 METABOLISM OF ISOFLAVONES, LIGNANS AND PRENYLFLAVONOIDS BY INTESTINAL BACTERIA: PRODUCER PHENOTYPING AND RELATION WITH INTESTINAL COMMUNITY  
POSSEMIERS,S: EECKHAUDT,E: DEPYPERE,H: VERSTRAETE,W  
FEMS MICROBIAL ECOL (2007) 61 (2) pp. 372-383 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
GHENT UNIV LAB MICROBIAL ECOLOGY & TECHNOL GHENT BELGIUM
- H20962 XANTHOSUMOLS, DIACYLGLYCEROL ACYLTRANSFERASE INHIBITORS, FROM *HUMULUS LUPULUS*.  
TABATA,N: ITO,M: TOMODA,H: OMURA,S:  
PHYTOCHEMISTRY (1997) 46 (4) pp. 683-687 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
KITASATO INST RES CENT BIOL FUNCTION TOKYO 108 JAPAN
- H31111 INHIBITORS OF NITRIC OXIDE PRODUCTION FROM HOPS (*HUMULUS LUPULUS* L.).  
ZHAO,F: NOZAWA,H: DAIKONNYA,A: KONDO,K: KITANAKA,S:  
BIOL PHARM BULL (2003) 26 (1) pp. 61-65 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
KIRIN BREWERY CO LTD CENTRAL LAB KEY TECHNOLOGY KANAGAWA 2360004 JAPAN
- H32723 PRENYLFLAVONOIDS AND PHLOROGLUCINOL DERIVATIVES FROM HOPS (*HUMULUS LUPULUS*).  
ZHAO,F: WATANABE,Y: NOZAWA,H: DAIKONNYA,A: KONDO,K: KITANAKA,S:  
J NAT PROD (2005) 68 (1) pp. 43-49 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
KIRIN BREWERY CO LTD CENT LAB KEY TECHNOL KANAGAWA 2360004 JAPAN
- L03979 ANTIPROLIFERATIVE AND CYTOTOXIC EFFECTS OF PRENYLATED FLAVONOIDS FROM HOPS (*HUMULUS LUPULUS*) IN HUMAN CANCER CELL LINES.  
MIRANDA,CL: STEVENS,JF: HELMRICH,A: HENDERSON,MC: RODRIGUEZ,RJ: YANG,YH: DEINZER,ML: BARNES,DW: BUHLER,DR:  
FOOD CHEM TOXICOL (1999) 37 (4) pp. 271-285 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
OREGON STATE UNIV DEPT ENVIRON MOL TOXICOL COLL PHARM CORVALLIS OR 97331 USA

## LITERATURE CITED

- L04448 IDENTIFICATION OF A POTENT PHYTOESTROGEN IN HOPS (HUMULUS LUPULUS L.) AND BEER.  
MILLIGAN,SR: KALITA,JC: HEYERICK,A: RONG,H: DE COOMAN,L: DE KEUKELEIRE,D:  
J CLIN ENDOCRINOL METAB (1999) 83 (6) pp. 2249-2252 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
KING'S COLL PHYSIOL DIV SCH BIOMED SCI LONDON ENGLAND
- L08929 FATE OF XANTHOTHUMOL AND RELATED PRENYLFLAVONOIDS FROM HOPS TO BEER.  
STEVENS,JF: TAYLOR,AW: CLAWSON,JE: DEINZER,ML:  
J AGR FOOD CHEM (1999) 47 (6) pp. 2421-2428 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
OREGON STATE UNIV DEPT CHEM CORVALLIS OR 97331 USA
- L10217 ANTIOXIDANT AND PROOXIDANT ACTIONS OF PRENYLATED AND NONPRENYLATED CHALCONES AND FLAVANONES IN VITRO.  
MIRANDA,CL: STEVENS,JF: IVANOV,V: MC CALL,M: FREI,B: DEINZER,ML: BUHLER,DR:  
J AGR FOOD CHEM (2000) 48 pp. 3876-3884 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
OREGON STATE UNIV DEPT CHEM CORVALLIS OR USA
- L10219 IN VITRO INHIBITION OF HUMAN P450 ENZYMES BY PRENYLATED FLAVONOIDS FROM HOPS, HUMULUS LUPULUS.  
HENDERSON,MC: MIRANDA,CL: STEVENS,JF: DEINZER,ML: BUHLER,DR:  
XENOBIOTICA (2000) 30 (3) pp. 235-251 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
OREGON STATE UNIV DEP ENVIRONMENTAL MOL TOXICOL CHEM CORVALLSI OR 97331 USA
- L14681 THE OESTROGENIC ACTIVITY OF HOPS (HUMULUS LUPULUS L.) REVISITED.  
KEUKELEIRE,D: MILLIGAN,D: COOMAN,D: HEYERICK,L:  
PHARM PHARMACOL LETT (1997) 7 (2/3) pp. 83-86 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
UNIV GENT FAC PHARM SCIENCES LAB PHARMACO PHYTOCHEM GENT BELGIUM
- L15429 INFLUENCE OF PRENYLATED AND NON-PRENYLATED FLAVONOIDS ON LIVER MICROSOMAL LIPID PEROXIDATION AND OXIDATIVE INJURY IN RAT HEPATOCYTES.  
RODRIGUEZ,RJ: MIRANDA,CL: STEVENS,JF: DEINZER,ML: BUHLER,DR:  
FOOD CHEM TOXICOL (2001) 39 (5) pp. 437-445 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
OREGON STATE UNIV DEPT PHARMACEUTICAL SCI CORVALLIS OR USA

## LITERATURE CITED

- L19788 APOPTOSIS AND CYTOTOXICITY TO HL-60 BY TWO BONE RESORPTION INHIBITORS, HUMULONE AND XANTHOTHUMOL.  
TOBE,H:  
GAKUJUTSU KIYO KOCHI KOGYO KOTO SENMON GAKKO (2000) 45 pp. 39-44 INFORMATION CODED FROM AN ABSTRACT. \* CHEMICAL ABSTRACTS 134 51165 A  
KOCHI NATION COLL TECHNOL DEPT MATERI SCI ENGINEE JAPAN
- L25890 IDENTIFICATION AND BIOLOGICAL ACTIVITY OF MICROBIAL METABOLITES OF XANTHOTHUMOL.  
HERATH,W: FERREIRA,D: KHAN,SI: KHAN,IA:  
CHEM PHARM BULL (2003) 51 (11) pp. 1237-1240 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
UNIV MISSISSIPPI NAT CENT DEV NAT PROD RES INST PHARM SCI UNIVERSITY MS 38677 USA
- L25902 ANTIVIRAL ACTIVITY OF HOP CONSTITUENTS AGAINST A SERIES OF DNA AND RNA VIRUSES.  
BUCKWOLD,VE: WILSON,RJH: NALCA,A: BEER,BB: VOSS,TG: TURPIN,JA: BUCKHEIT III,RW: WEI,J: WENZEL-MATHERS,M: WALTON,EM: SMITH,RJ: PALLANSCH,M: WARD,P: WELLS,J: CHUVALA,L: SLOANE,S: PAULMAN,R: RUSSELL,J: HARTMAN,T: PTAK,R:  
ANTIVIRAL RES (2004) 61 (1) pp. 57-62 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
SOUTHERN RES INST INFECT DIS RES DEPT FREDERICK MD 21701 USA
- L26307 INHIBITION OF STREPTOCOCCUS MUTANS AND OTHER ORAL STREPTOCOCCI BY HOP (HUMULUS LUPULUS L.) CONSTITUENTS.  
BHATTACHARYA,S: VIRANI,S: ZAVRO,M: HAAS,GJ:  
ECON BOT (2003) 57 (1) pp. 118-125 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
FAIRLEIGH DICKINSON UNIV SCH NAT SCI TEANECK NJ 07666 USA
- L26905 IN VITRO PHASE II METABOLISM OF XANTHOTHUMOL BY HUMAN UDP-GLUCURONOSYLTRANSFERASES AND SULFOTRANSFERASES.  
RUEFER,CE: GERHAUSER,C: FRANK,N: BECKER,H: KULLING,SE:  
MOL NUTR FOOD RES (2005) 49 pp. 851-856 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
FED RES CEN NUTR FOOD INST NUTR PHYSIOL KARLSRUHE GERMANY
- L26906 XANTHOTHUMOL INDUCES APOPTOSIS IN CULTURED 40-16 HUMAN COLON CANCER CELLS BY ACTIVATION OF THE DEATH RECEPTOR- AND MITOCHONDRIAL PATHWAY.  
PAN,L: BECKER,H: GERHAUSER,C:  
MOL NUTR FOOD RES (2005) 49 pp. 837-843 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
GERMAN CAN RES CEN DIV TOX CANCER RISK FACTORS HEIDELBERG GERMANY

## LITERATURE CITED

- L26907 XANTHOTHUMOL KILLS B-CHRONIC LYMPHOCYTIC LEUKEMIA CELLS BY AN APOPTOTIC MECHANISM.  
LUST,S: VANHOECKE,B: JANSSENS,A: PHILIPPE,J: BRACKE,M: OFFNER,F:  
MOL NUTR FOOD RES (2005) 49 pp. 844-850 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
GHENT UNIV HOSP DEPT HEMATOL GENT BELGIUM
- L26908 XANTHOTHUMOL DOES NOT AFFECT THE COMPOSITION OF RAT INTESTINAL MICROBIOTA.  
HANSKE,L: HUSSONG,R: GERHAUSER,C: BLAUT,M: BRAUNE,A:  
MOL NUTR FOOD RES (2005) 49 pp. 868-873 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
GERMAN INST HUM NUTR POTSDAM DEPT GESTROINTEST MICROBIOL NUTHETAL GERMANY
- L26909 A SAFETY STUDY OF ORAL XANTHOTHUMOL ADMINISTRATION AND ITS INFLUENCE ON FERTILITY IN SPRAGUE DAWLEY RATS.  
HUSSONG,R: FRANK,N: ITTRICH,C: OWEN,R: BECKER,H: GERHAUSER,C:  
MOL NUTR FOOD RES (2005) 49 pp. 861-867 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
DEUTSCHES KREBSCHUNGSZENTRUM DIV TOXICOL CAN RISK FACTORS HEIDELBERG GERMANY
- L27032 XANTHOTHUMOL METABOLITES IN FAECES OF RATS.  
NOOKANDEH,A: FRANK,N: STEINER,F: ELLINGER,R: SCHNEIDER,B: GERHAUSER,C: BECKER,H:  
PHYTOCHEMISTRY (2004) 65 (5) pp. 561-570 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
UNIV SAARLANDS PHARMAKOG & ANAL PHYTOCHEM SAARBRUCKEN D-6600 GERMANY
- L27089 XANTHOTHUMOL STIMULATES IODIDE UPTAKE IN RAT THYROID-DERIVED FRTL-5 CELLS.  
RADOVIC,B: SCHUMUTZLER,C: KOHRIE,J:  
MOL NUTR FOOD RES (2005) 49 pp. 832-836 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
CHARITE UNIV BERLIN INST EXPER ENDOKRINOL FORSCHUNGSZENTRUM ENFORCE BERLIN D-10117 GERMANY
- L27365 IN VITRO GLUCURONIDATION OF XANTHOTHUMOL, A FLAVONOID IN HOPS AND BEER, BY RAT AND HUMAN LIVER MICROSOMES  
YILMAZER,M: STEVENS,JF: BUHLER,DR:  
FEBS LETT (2001) 491 pp. 252-256 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
OREGON STATE UNIV DEPT ENVIRONMENTAL MOLECULAR TOXICOLOGY CORVALLIS OR 97331 USA



## LITERATURE CITED

- L27366 INFLUENCE OF PRENYLATED FLAVONOIDS ON LIVER MICROSOMAL LIPID PEROXIDATION AND OXIDATIVE INJURY IN RAT HEPATOCYTES  
RODRIGUEZ,RF: MIRANDA,CL: STEVENS,JF: DEINZER,ML: BUHLER,DR:  
FOOD CHEM TOXICOL (2001) 39 pp. 437-445 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
OREGON STATE UNIV DEPT PHARM SCI CORVALLIS OR USA
- L27367 IN VITRO BIOTRANSFORMATION OF XANTHOTHUMOL, A FLAVONOID FROM HOPS (HUMULUS LUPULUS), BY RAT LIVER MICROSOMES.  
YILMAZER,M: STEVENS,JF: DEINZER,ML: BUHLER,DR:  
DRUG METAB DISPOS (2001) 29 (3) pp. 223-231 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
OREGON STATE UNIV DEPT ENVIRON MOL TOXICOL CORVALLIS OR USA
- L27368 INHIBITION OF PEROXYNITRITE-MEDIATED LDL OXIDATION BY PRENYLATED FLAVONOIDS: THE A,B-UNSATURATED KETO FUNCTIONALITY OF 2'-HYDROXYCHALCONES AS A NOVEL ANTIOXIDANT PHARMACOPHORE.  
STEVENS,JF: MIRANDA,CL: FREI,B: BUHLER,D:  
CHEM. RES. TOXICOL (2003) 16 pp. 1277-1286 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
OREGON STATE UNIV DEPT CHEM CORVALLIS OREGON 97331-7301 USA
- L27369 PRENYLATED CHALCONES AND FLAVANONES AS INDUCERS OF QUINONE REDUCTASE IN MOUSE HEPA 1C1C7 CELLS.  
MIRANDA,CL: APONSO,GLM: STEVENS,JF: DEINZER,ML: BUHLER,DR:  
CANCER LETT (2000) 149 pp. 21-29 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
OREGON STATE UNIV DEPT ENVIRON MOL TOXICOLOGY CORVALLIS OREGON 97331 USA
- L27370 THE ENDOCRINE ACTIVITIES OF 8-PRENYLNARINGENIN AND RELATED HOP (HUMULUS LUPULUS L.) FLAVONOIDS.  
MILLIGAN,SR: KALITA,JC: POCOOCK,V: VAN DE KAUTER,V: STEVENS,JF: DEINZER,ML: RONG,H: DE KEUKELEIRE,D:  
J CLIN ENDOCRINOL METAB (2000) 85 (12) pp. 4912-4915 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
OREGON STATE UNIV DEPT CHEM CORVALLIS OREGON 97331 USA
- L27371 PRENYLFLAVONOIDS FROM HOPS INHIBIT THE METABOLIC ACTIVATION OF THE CARCINOGENIC HETEROCYCLIC AMINE 2-AMINO-3-METHYLIMIDAZO[4,5-F]QUINOLINE, MEDIATED BY CDNA-EXPRESSED HUMAN CYP1A2.  
MIRANDA,CL: YANG,YH,: HENDERSON,MC: STEVENS,JF: SANTANA-RIOS,G: DEINZER,ML: BUHLER,DR:  
DRUG METAB DISPOS (2000) 28 (11) pp. 1297-1302 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
OREGON STATE UNIV DEPT CHEM CORVALLIS OREGON 97331-7301 USA

## LITERATURE CITED

- L28323 ACTIVATION OF PROESTROGENS FROM HOPS (HUMULUS LUPULUS L.) BY INTESTINAL MICROBIOTA; CONVERSION OF ISOXANTHOTHUMOL INTO 8-PRENYLNARINGENIN.  
POSSEMIERS,S: HEYERICK,A: ROBBINS,V: DE KEUKELEIRE,D: VERSTRAETE,W:  
J AGR FOOD CHEM (2005) 53 pp. 6281-6288 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
GENT UNIV LAB MICROBIAL ECOLOGY TECH FAC BIOSCI ENG GENT B-9000 BELGIUM
- L29205 METABOLISM OF XANTHOTHUMOL AND ISOXANTHOTHUMOL,PRENYLATED FLAVONOIDS FROM HOPS (HUMULUS LUPULUS L.), BY HUMAN LIVER MICROSOME.  
NIKOLIC,D: LI,YM: CHADWICK,LR: PAULI,GF: VAN BREEMEN,RB:  
J MASS SPECTROM (2005) 40 pp. 289-299 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
UNIV ILL CHGO DEPT MED CHEM PHARMACOG COLL PHARM CHICAGO IL 60612-7231 USA
- L29296 XANTHOTHUMOL ISOLATED FROM HUMULUS LUPULUS INHIBITS MENADIONE-INDUCED DNA DAMAGE THROUGH INDUCTION OF QUINONE REDUCTASE  
DIETZ,BR: KANG,YH: LIU,GW: EGGLEER,AL: YAO,P: CHADWICK,LR: PAULI,GF: FARNSWORTH,NR: MESECAR,AD: VAN BREEMEN,RB: BOLTON,JL:  
CHEM RES TOXICOL (2005) 18 (8) pp. 1296-1305 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
COLLEGE OF PHARMACY, UNIVERSITY OF ILLINOIS AT CHICAGO DEPARTMENT OF MEDICINAL CHEMISTRY AND PHARMACOGNOSY UIC/NIH CENTER FOR BOTANICAL AND DIETARY SUPPLEMENTS CHICAGO ILLINOIS 60612 USA
- L29422 XANTHOTHUMOL, A PRENYLFLAVONOID DERIVED FROM HOPS INDUCES APOPTOSIS AND INHIBITS NF-KAPPA-B ACTIVATION IN PROSTATE EPITHELIAL CELLS  
COLGATE,EC: MIRANDA,CL: STEVENS,JF: BRAY,TM: HO,E:  
CANCER LETT (2007) 246 (2007) pp. 201-209 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
OREGON STATE UNIVERSITY DEPARTMENT OF NUTRITION AND EXERCISE SCIENCES CORVALLIS OREGON USA
- L30162 MODULATION OF BREAST CANCER CELL SURVIVAL BY AROMATASE INHIBITION HOP (HUMULUS IUPULUS L.) FLAVONOIDS  
MONTEIRO,R: FARIA,A: AZEVEDO,I: CALHAU,C:  
J STEROID BIOCHEM MOL BIOL (2007) 105 pp. 124-130 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
UNIV PORTO DEPT BIOCHEM FACULTY MEDICINE PORTO 4200-319 PORTUGAL
- L30184 SYNTHESIS OF DEMETHYLXANTHOTHUMOL, A NEW POTENT APOPTOSIS-INDUCING AGENT FROM HOPS.  
DILLER,RA: RIEPL,HM: FRIAS,C: HENZE,G: PROKOP,A:  
CHEMISTRY & BIODIVERSITY (2005) 2 pp. 1331-1337 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
TECHNICAL UNIV MUNICH INST TECHNOL BIOGENIC RES MUNICH D-94315 GERMANY

## LITERATURE CITED

- L30185 IN VITRO ANTIPLASMODIAL ACTIVITY OF PRENYLATED CHALCONE DERIVATIVES OF HOPS (HUMULUS LUPULUS) AND THEIR INTRACTION WITH HAEMIN.  
FROLICH,S: SCHUBERT.C: BIENZLE,U: JENETT-SIEMS,K:  
J ANTIMICROB CHEMOTHER (2005) 55 pp. 883-887 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
FREIE UNIV BERLIN INST PHARM BERLIN D-141195 GERMANY
- L30188 XANTHOTHUMOL, A NOVEL ANTI-HIV-1 AGENT PURIFIED FROM HOPS HUMULUS LUPULUS.  
WANG,Q: DING,ZH: LIU,JK: ZHRNG,YT:  
ANTIVIRAL RES (2004) 64 pp. 189-194 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
CHIN ACAD SCI LAB MOLE IMMUNOPHARMACOL KUNMING INST ZOOLOGY KUNMING 650223 CHINA
- L30191 BINDING OF THE HOP (HUMULUS LUPULUS L.) CHALCONE XANTHOTHUMOL TO CYTOSOLIC PROTEINS IN CACO-2 INTESTINAL EPITHELIAL CELLS.  
PANG,Y: NIKOLIC,D: ZHU,DW: CHADWICK,LR: PAULI,GF: FARNSWORTH,NR: VAN BREEMEN,RB:  
MOL NUT FOOD RES (2007) 51 pp. 872-879 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
UNIVERSITY OF ILLINOIS AT CHICAGO DEPT MED CHEM & PHARMACOGNOSY COLLEGE OF PHARMACY CHICAGO IL 60612 USA
- L30193 XANTHOTHUMOL ISOLATED FROM HUMULUS LUPULUS INHIBITS MENADIONE-INDUCED DNA DAMAGE THROUGH INDUCTION OF QUINONE REDUCTASE  
DIETZ,BM; KANG,YH; LIU, GW; EGGLEER, AL; YAO,P; CHADWICK,LR; PAULI,GF; FARNSWORTH,NR; MESECAR,AD; VAN BREEMEN,RB; BOLTON,JL  
CHEM RES TOXICOL (2005) 18 (8) pp. 1296-1305 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
UNIV ILLINOIS CHICAGO DEPT MED CHEM PHARMACOGNOSY COLL PHARM CHICAGO IL USA
- L30195 EFFECT OF HOP (HUMULUS LUPULUS L.) FLAVONOIDS ON AROMATASE (ESTROGEN SYNTHASE) ACTIVITY.  
MONTEIRO,R: BECKER,H: AZEVEDO,I: CALHAU,C:  
J AGR FOOD CHEM (2006) 54 pp. 2938-2943 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
UNIV PORTO DEPT BIOCHEM FAC MED PORTUGAL
- L30197 ANTICOCCIDIAL EFFECTS OF XANTHOTHUMOL.  
ALLEN,PC:  
AVIAN DISEASES (2007) 51 pp. 21-26 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
ANIMAL PARASITIC DISEASES LAB U.S DEPT AGRI-AGRI RES SERVICE BELTSVILLE MD 20705 USA

## LITERATURE CITED

- L30198 MECHANISMS OF THE ANTIANGIOGENIC ACTIVITY BY THE HOP FLANONOID XANTHOTHUMOL: NF-KB AND AKT AS TARGETS.  
ALBINI,A: DELL-EVA,R: VENE,R: FERRARI,N: BUHLER,DR: NOONAN,DM: FASSINA,G:  
FASEB J EXPRESS ARTICLE 10.1096/FJ.05.5128.FJE (2005) 2005 pp. 1-21 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
MOLE ONCOL LAB ISTITUO NAZIONALE PER LA RICERCA SUL CANCRO GENOA ITALY
- L30199 ANTIINVASIVE EFFECT OF XANTHOTHUMOL, A PRENYLATED CHALCONE PRESENT IN HOPS (HUMULUS LUPULUS L.) AND BEER.  
VANHOECKE,B: DERYCKE,L: VAN MARCK,V: DEYPERE,H: DE KEUKELEIRE,D: BRACKE,M:  
INT J CANCER (2005) 117 pp. 889-895 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
GHENT UNIV HOSP DEPT GYNECOLOGY GHENT B-9000 BELGIUM
- L30201 EFFECT OF XANTHOTHUMOL AND ISOANTHOTHUMOL ON 3T3-L1 CELL APOPTOSIS AND ADIPOGENESIS.  
YANG,JY: DELLA-FERA,MA: RAYALAM,S: BAILE,CA:  
APOPTOSIS (2007) 12 pp. 1953-1963 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
UNIV GEORGIA DEPT ANIMAL DAIRY SCI ATHENS GA 30602-2771 USA
- L30215 IDENTIFICATION OF HUMAN HEPATIC CYTOCHROME P450 ENZYMES INVOLVED IN THE METABOLISM OF 8-PRENYLNARINGENIN AND ISOXANTHOTHUMOL FROM HOPS (HUMULUS LUPULUS L.)  
GUO,J; NIKOLIC,D; CHADWICK,LR; PAULI,GF; VAN BREEMEN,RB  
DRUG METABOL DISPOSIT (2006) 34 (7) pp. 1152-1159 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
UNIV ILLINOIS CHICAGO DEPT MED CHEM PHARMACOGNOSY COLL PHARM CHICAGO IL 60612 USA
- L30218 SCREENING METHOD FOR THE DISCOVERY OF POTENTIAL CANCER CHEMOPREVENTION AGENTS BASED ON MASS SPECTROMETRIC DETECTION OF ALKYLATED KEAP1  
LIU,G; EGGLER,A; DIETZ,B; MESECAR,A; BOLTON,JA; PEZZUTO,JM; VAN BREEMEN,RB  
ANAL CHEM (2005) 77 (19) pp. 6407-6414 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
UNIV ILLINOIS CHICAGO DEPT MED CHEM PHARMACOGNOSY COLL PHARM CHICAGO IL 60612 USA
- L30228 XANTHOTHUMOL, THE CHALCONE FROM BEER HOPS (HUMULUS LUPULUS L.), IS THE LIGAND FOR FARNESOID X RECEPTOR AND AMELIORATES LIPID AND GLUCOSE METABOLISM IN KK-A<sup>y</sup> MICE  
NOZAWA,H  
BIOCHEM BIOPHYS RES COMMUN (2005) 336 (3) pp. 754-761 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
KIRIN BREWERY CO. LTD. R & D LABORATORY FUNCTIONAL FOOD DIVISION GUNMA 370-1295 JAPAN

## LITERATURE CITED

- L30229 REGULATION OF OSTEOBLASTIC PHENOTYPE AND GENE EXPRESSION BY HOP-DERIVED PHYTOESTROGENS  
EFFENBERGER,KE; JOHNSEN,SA; MONROE,DG; SPELSBERG,TC; WESTENDORF,JJ  
J STEROID BIOCHEM MOL BIOL (2005) 96 (5) pp. 387-399 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
UNIV HAMBURG INSTITUTE FOR EXPERIMENTAL AND CLINICAL PHARMACOLOGY AND TOXICOLOGY UNIV HOSPITAL EPPENDORF HAMBURG  
22527 GERMANY
- L30230 INFLUENCE OF XANTHUMOL ON THE BINDING BEHAVIOR OF GABA-A RECEPTORS AND THEIR LATERAL MOTILITY AT HIPPOCAMPAL  
NEURONS  
MEISSNER,O; HAEBERLEIN,H:  
PLANTA MED (2006) 72 (7) pp. 656-658 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
UNIV MARBURG DEPT PHARM BIOLOGY MARBURG GERMANY
- L30253 TREATMENT OF PC-3 AND DU145 PROSTATE CANCER CELLS BY PRENYLFLAVONOIDS FROM HOP (HUMULUS LUPULUS L.) INDUCES A CASPASE  
-INDEPENDENT FORM OF CELL DEATH  
DELMULLE,L; VANDEN BERGHE,T; DE KEUKELEIRE,D; VANDENABEELE,P  
PHYTOTHER RES 22 (2) pp. 197-203 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
UNIV GHENT FACULTY OF PHARMACEUTICAL SCIENCES LABORATORY OF PHARMACOGNOSY AND PHYTOCHEMISTRY GHENT B-9000 BELGIUM
- L30258 CANCER CHEMOPREVENTIVE ACTIVITY OF XANTHUMOL, A NATURAL PRODUCT DERIVED FROM HOP  
GERHAUSER,C; ALT,A; HEISS,E; GAMAL-ELDEEN,A; KLIMO,K; KNAUFT,J; NEUMANN,I; SHERF,HR; FRANK,N; BARTSCH,H; BECKER,H  
MOLECULAR CANCER THERAPEUTICS (2002) 1 (11) pp. 959-969 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
DEUTSCHES KREBSFORSCHUNGSZENTRUM HEIDELBERG GERMANY
- L30335 PROTECTIVE EFFECTS OF XANTHUMOL AGAINST THE GENOTOXICITY OF BENZO(A)PYRENE (BAP), 2-AMINO-3-METHYLIMIDAZO[4,5-F]  
QUINOLINE (IQ) AND TERT-BUTYL HYDROPEROXIDE (T-BOOH) IN HEP G2 HUMAN HEPATOMA CELLS  
PLAZAR,J; ZEGURA,B; LAH,TT; FILIPIC,M:  
MUTAT RES (2007) 632 pp. 1-8 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
NAT INST BIOL LJUBLJANA 1000 SLOVENIA
- L30466 ANTI-PROLIFERATIVE PROPERTIES OF PHENYLATED FLAVONOIDS FROM HOPS (HUMULUS LUPULUS L.) IN HUMAN PROSTATE CANCER CELL  
LINES  
DELMULLE,L; BELLAHCENE,A; DHOOGHE,W; COMHAIRE,F; ROELENS,F; HUVAERE,K; HEYERICK,A; CASTRONOVO,V; DEKEUKELEIRE,D  
PHYTOMEDICINE (2006) 13 pp. 732-734 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
GHENT UNIV FAC PHARM SCI GHENT B-9000 BELGIUM

## LITERATURE CITED

- L30574 IDENTIFICATION OF HUMAN HEPATIC CYTOCHROME P450 ENZYMES INVOLVED IN THE METABOLISM OF 8-PRENYLNARINGENIN AND ISOXANTHOTHUMOL FROM HOPS (*HUMULUS LUPULUS* L.).  
GUO,J: NIKOLIC,D: CHADWICK,LR: PAULI,GF: VAN BREEMEN, BR:  
DRUG METABOLISM DISPOSITION (2006) 34 (7) pp. 1152-1159 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
UNIV ILL CHICAGO DEPT MED CHEM PHARMACOL COLL PHARMACY CHICAGO ILLINOIS 60612 USA
- L30576 INFLUENCE OF XANTHOTHUMOL ON THE BINDING BEHAVIOR OF GABAA RECEPTORS AND THEIR LAATERAL MOBILITY AT HIPPOCAMPAL NEURONS.  
MEISSNER,O: HABERLEIN,H:  
PLANTA MED (2006) 72 pp. 656-658 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
UNIV MARBURG DEPT PHARMACEUT BIOL MARBURG GERMANY
- L30577 ANTIGENOTOXIC EFFECT OF XANTHOTHUMOL IN RAT LIVER SLICES.  
PLAZAR,J: FILIPIC,M: GROOTHUIS,GMM:  
TOXICOLOGY (2008) 22 (2) pp. 318-327 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
UNIV GRONINGEN DEPT PHARMACOKINETICS DRUG DELIVERY UNIV CENT PHARMACY GRONINGEN NETHERLANDS
- L30636 ANTIMUTAGENICITY OF HOPS (*HUMULUS LUPULUS* L.): BIOASSAY-DIRECTED FRACTIONATION AND ISOLATION OF XANTHOTHUMOL  
KAC,J: PLAZAR,J: MLINARIC,A: ZEGURA,B: LAH,TT: FILIPIC,M  
PHYTOMEDICINE (2008) 15 (3) pp. 216-220 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
UNIV LJUBLJANA DEPT PHARMACEUTICAL BIOL FAC PHARMACY LJUBLJANA SLOVENIA
- M12709 INHIBITION OF ADENOSINE 3',5'-CYCLIC MONOPHOSPHATE PHOSPHODIESTERASE BY COMPONENTS OF *SOPHORA FLAVESCENS* AITON.  
OHMOTO,T: AIKAWA,R: NIKAIDO,T: SANKAWA,U: WU,LJ: UENO,A: FUKUSHIMA,S:  
CHEM PHARM BULL (1986) 34 (5) pp. 2094-2099 SOURCE WAS AN ORIGINAL RESEARCH PAPER.  
TOHO UNIV SCH PHARMACEUT SCI CHIBA 274 JAPAN