

CYP24A1 Polyclonal Antibody

Catalog No: YT1198

Reactivity: Human; Rat; Mouse;

Applications: WB;IHC;IF;ELISA

Target: CYP24A1

Fields: >>Steroid biosynthesis;>>Metabolic pathways;>>Parathyroid hormone

synthesis, secretion and action;>>MicroRNAs in cancer

Gene Name: CYP24A1

Protein Name: 1,25-dihydroxyvitamin D(3) 24-hydroxylase mitochondrial

Human Gene Id: 1591

Human Swiss Prot

No:

Mouse Swiss Prot

No:

Immunogen: The antiserum was produced against synthesized peptide derived from human

Cytochrome P450 24A1. AA range:411-460

Specificity: CYP24A1 Polyclonal Antibody detects endogenous levels of CYP24A1 protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Q07973

Q64441

Dilution : WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:10000.. IF 1:50-200

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

1/3

Observed Band: 38kD

Background: cytochrome P450 family 24 subfamily A member 1(CYP24A1) Homo sapiens

This gene encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and

other lipids. This mitochondrial protein initiates the degradation of

1,25-dihydroxyvitamin D3, the physiologically active form of vitamin D3, by hydroxylation of the side chain. In regulating the level of vitamin D3, this enzyme plays a role in calcium homeostasis and the vitamin D endocrine system. Alternatively spliced transcript variants encoding different isoforms have been

found for this gene. [provided by RefSeq, Jul 2008],

Function: catalytic activity:Calcidiol + NADPH + O(2) = secalciferol + NADP(+) +

H(2)O.,catalytic activity:Calcitriol + NADPH + O(2) = calcitetrol + NADP(+) + H(2)O.,cofactor:Heme group.,function:Has a role in maintaining calcium homeostasis. Catalyzes the NADPH-dependent 24-hydroxylation of calcidiol (25-hydroxyvitamin D(3)) and calcitriol (1-alpha,25-dihydroxyvitamin D(3)). The enzyme can perform up to 6 rounds of hydroxylation of calcitriol leading to

calcitroic acid. It also shows 23-hydroxylating activity leading to

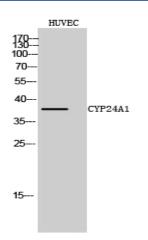
1-alpha,25-dihydroxyvitamin D(3)-26,23-lactone as end product.,similarity:Belongs to the cytochrome P450 family.,

Subcellular Location:

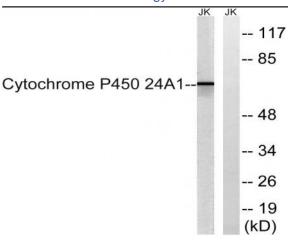
Mitochondrion.

Expression: PCR rescued clones,

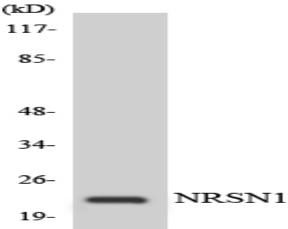
Products Images



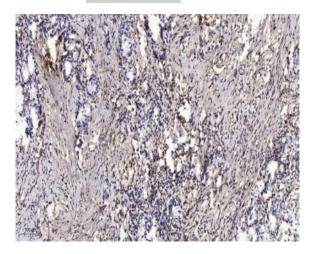
Western Blot analysis of HUVEC cells using CYP24A1 Polyclonal Antibody



Western blot analysis of lysates from JurKat cells, using Cytochrome P450 24A1 Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from RAW264.7cells using C56D2 antibody.



Immunohistochemical analysis of paraffin-embedded human Gastric adenocarcinoma. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).