

CYP26A1 Antibody

Rabbit mAb Catalog # AP91710

Product Information

Application WB, IHC
Primary Accession O43174
Reactivity Rat, Human
Clonality Monoclonal

Other Names CP26; CYP26; cyp26a1; hP450RAI; P450RAI; P450RAI1;

IsotypeRabbit IgGHostRabbitCalculated MW56199

Additional Information

Dilution WB 1:500~1:2000 IHC 1:50~1:200

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human CYP26A1

Description Plays a key role in retinoic acid metabolism. Acts on retinoids, including

all-trans-retinoic acid (RA) and its stereoisomer 9-cis-RA. Capable of both 4-hydroxylation and 18-hydroxylation. Responsible for generation of several hydroxylated forms of RA, including 4-OH-RA, 4-oxo-RA and 18-OH-RA.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium

azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term.

Avoid freeze / thaw cycle.

Protein Information

Name CYP26A1 {ECO:0000303 | PubMed:26937021,

ECO:0000312 | HGNC:HGNC:2603}

Function A cytochrome P450 monooxygenase involved in the metabolism of

retinoates (RAs), the active metabolites of vitamin A, and critical signaling

molecules in animals (PubMed:22020119, PubMed:9228017,

PubMed: 9716180). RAs exist as at least four different isomers: all-trans-RA (atRA), 9-cis-RA, 13-cis-RA, and 9,13-dicis-RA, where atRA is considered to be the biologically active isomer, although 9-cis-RA and 13-cis-RA also have activity (Probable). Catalyzes the hydroxylation of atRA primarily at C-4 and C-18, thereby contributing to the regulation of atRA homeostasis and signaling (PubMed: 22020119, PubMed: 9228017, PubMed: 9716180).

Hydroxylation of atRA limits its biological activity and initiates a degradative process leading to its eventual elimination (Probable). Involved in the

convertion of atRA to all-trans-4-oxo-RA. Able to metabolize other RAs such as 9-cis, 13-cis and 9,13-di-cis RA (By similarity) (PubMed: 9228017). Can oxidize all-trans-13,14- dihydroretinoate (DRA) to metabolites which could include

all-trans-4- oxo-DRA, all-trans-4-hydroxy-DRA, all-trans-5,8-epoxy-DRA, and all-trans-18-hydroxy-DRA (By similarity). May play a role in the oxidative metabolism of xenobiotics such as tazarotenic acid (PubMed: 26937021).

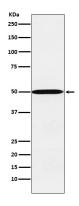
Cellular Location

Endoplasmic reticulum membrane; Peripheral membrane protein. Microsome membrane; Peripheral membrane protein

Tissue Location

Expressed in most fetal and adult tissues with highest levels in adult liver, heart, pituitary gland, adrenal gland, placenta and regions of the brain (PubMed:9826557). Expressed at high levels in lung, pancreas, skin and uterus (at protein level) (PubMed:22020119). Lower expression level is detected in spleen, kidney, intestine and adipose tissue (at protein level) (PubMed:22020119).

Images



Western blot analysis of CYP26A1 expression in HepG2 cell lysate.

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