

CYP26A1 Polyclonal Antibody

Catalog # AP69382

Specification

CYP26A1 Polyclonal Antibody - Product Information

Application WB, IF Primary Accession 043174

Reactivity Human, Mouse, Rat

Host Rabbit Clonality Polyclonal

CYP26A1 Polyclonal Antibody - Additional Information

Gene ID 1592

Other Names

CYP26A1; CYP26; P450RAI1; Cytochrome P450 26A1; Cytochrome P450 retinoic acid-inactivating 1; Cytochrome P450RAI; hP450RAI; Retinoic acid 4-hydroxylase; Retinoic acid-metabolizing cytochrome

Dilution

WB $\sim\sim$ Western Blot: 1/500 - 1/2000. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.

IF~~1:50~200

Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions

-20°C

CYP26A1 Polyclonal Antibody - 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:9228017, PubMed:9716180, 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

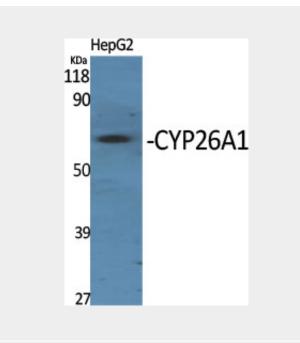
Expressed in most fetal and adult tissues with highest levels in adult liver, heart, pituitary gland, adrenal gland, placenta and regions of the brain (PubMed:9826557). Expressed at high levels in lung, pancreas, skin and uterus (at protein level) (PubMed:22020119). Lower expression level is detected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

CYP26A1 Polyclonal Antibody - Protocols

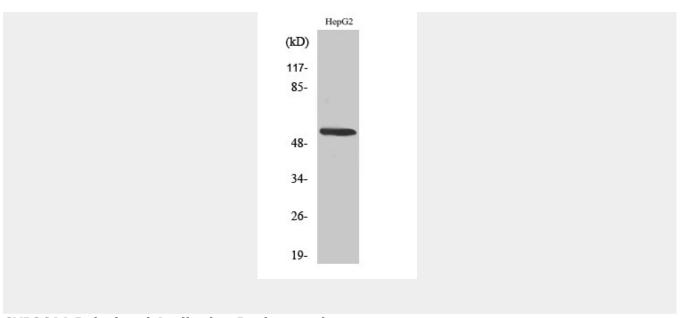
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CYP26A1 Polyclonal Antibody - Images







CYP26A1 Polyclonal Antibody - Background

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.