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Cytochrome P450 26A1 Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51143

Specification

Cytochrome P450 26A1 Antibody - Product Information

Application	**WB, IP, ICC, E**
Primary Accession	O43174
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**56 KDa**

Cytochrome P450 26A1 Antibody - Additional Information

Gene ID 1592

Other Names
Cytochrome P450 26A1, 114--, Cytochrome P450 retinoic acid-inactivating 1, Cytochrome P450RAI, hP450RAI, Retinoic acid 4-hydroxylase, Retinoic acid-metabolizing cytochrome, CYP26A1, CYP26, P450RAI1

Dilution
WB~~1:1000
IP~~N/A
ICC~~N/A
E~~N/A

Format
0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage
Store at -20 °C.Stable for 12 months from date of receipt

Cytochrome P450 26A1 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:<a

href="http://www.uniprot.org/citations/22020119" target="_blank">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).

Cytochrome P450 26A1 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

Cytochrome P450 26A1 Antibody - Images

Cytochrome P450 26A1 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.

Cytochrome P450 26A1 Antibody - References

White J.A.,et al.J. Biol. Chem. 272:18538-18541(1997).
Sonneveld E.,et al.Cell Growth Differ. 9:629-637(1998).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Deloukas P.,et al.Nature 429:375-381(2004).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.