

CYP26 / CYP26A1 Antibody (Internal)

Goat Polyclonal Antibody Catalog # ALS13190

Specification

CYP26 / CYP26A1 Antibody (Internal) - Product Information

Application IHC
Primary Accession O43174
Reactivity Human
Host Goat
Clonality Polyclonal
Calculated MW 56kDa KDa

CYP26 / CYP26A1 Antibody (Internal) - Additional Information

Gene ID 1592

Other Names

Cytochrome P450 26A1, 1.14.-.-, Cytochrome P450 retinoic acid-inactivating 1, Cytochrome P450RAI, hP450RAI, Retinoic acid 4-hydroxylase, Retinoic acid-metabolizing cytochrome, CYP26A1, CYP26, P450RAI1

Target/Specificity

Human CYP26A1. This antibody is expected to recognize both reported isoforms (NP_000774.2; NP_476498.1)

Reconstitution & Storage

Store at -20°C. Minimize freezing and thawing.

Precautions

CYP26 / CYP26A1 Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

CYP26 / CYP26A1 Antibody (Internal) - 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:<a



href="http://www.uniprot.org/citations/9228017" target="_blank">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

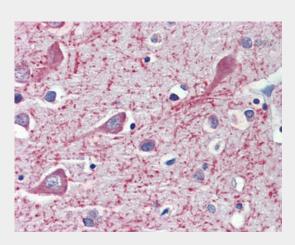
Expressed in most fetal and adult tissues with highest levels in adult liver, heart, pituitary gland, adrenal gland, placenta and regions of the brain (PubMed:9826557). Expressed at high levels in lung, pancreas, skin and uterus (at protein level) (PubMed:22020119). Lower expression level is detected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

CYP26 / CYP26A1 Antibody (Internal) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

CYP26 / CYP26A1 Antibody (Internal) - Images

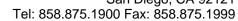


Anti-CYP26A1 antibody IHC of human brain, cortex.

CYP26 / CYP26A1 Antibody (Internal) - 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.

CYP26 / CYP26A1 Antibody (Internal) - 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.