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CYP26C1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7892b

Product Information

Application	IHC-P, WB, E
Primary Accession	Q6V0L0
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	57111
Antigen Region	410-439

Additional Information

Gene ID	340665
Other Names	Cytochrome P450 26C1, 114--, CYP26C1
Target/Specificity	This CYP26C1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 410-439 amino acids from the C-terminal region of human CYP26C1.
Dilution	IHC-P~~1:100~500 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CYP26C1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CYP26C1
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:14532297). 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 oxidation of atRA

primarily at C-4 (PubMed:14532297). Oxidation of atRA limits its biological activity and initiates a degradative process leading to its eventual elimination, thereby contributes to the regulation of atRA homeostasis and signaling (Probable). Able to metabolize other RAs such as 9-cis with high efficiency (PubMed:14532297). 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). Shares sequence similarity with other CYP26 family members, but has higher affinity to 9-cis-RA and is much less sensitive to the inhibitory effects of ketoconazole (PubMed:14532297). In cooperation with Cyp26a1, contributes to the CNS patterning and the development of regions of higher visual acuity (By similarity).

Cellular Location Membrane; Single-pass membrane protein

Tissue Location Detected in most tissues at very low level.

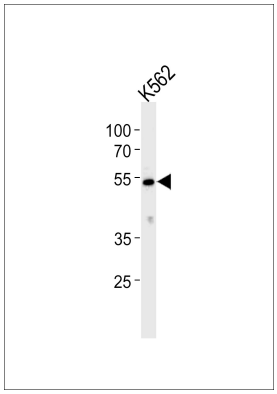
Background

CYP26C1 is 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 enzyme is involved in the catabolism of all-trans- and 9-cis-retinoic acid, and thus contributes to the regulation of retinoic acid levels in cells and tissues.

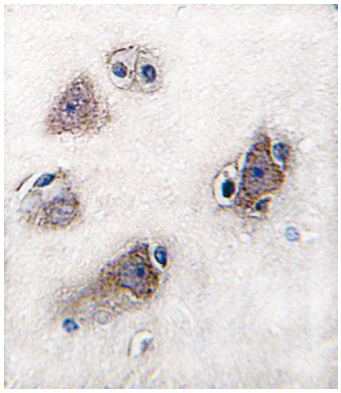
References

Rat,E., Birth Defects Res. Part A Clin. Mol. Teratol. 76 (6), 491-498 (2006)
Taimi,M., J. Biol. Chem. 279 (1), 77-85 (2004)
Nelson,D.R., Pharmacogenetics 14 (1), 1-18 (2004)

Images



CYP26C1 Antibody (C-term) (Cat. #AP7892b) western blot analysis in K562 cell line lysates (35ug/lane).This demonstrates the CYP26C1 antibody detected the CYP26C1 protein (arrow).



Formalin-fixed and paraffin-embedded human brain tissue reacted with CYP26C1 antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.