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CYP26B1 Antibody (internal region)

Peptide-affinity purified goat antibody
Catalog # AF2543a

Specification

CYP26B1 Antibody (internal region) - Product Information

Application	**IHC, E**
Primary Accession	Q9NR63
Other Accession	NP_063938.1, 56603, 232174 (mouse), 312495 (rat)
Reactivity	**Human, Mouse**
Predicted	**Rat, Dog**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**0.5 mg/ml**
Isotype	**IgG**
Calculated MW	**57513**

CYP26B1 Antibody (internal region) - Additional Information

Gene ID 56603

Other Names
Cytochrome P450 26B1, 1.14.-.-, Cytochrome P450 26A2, Cytochrome P450 retinoic acid-inactivating 2, Cytochrome P450RAI-2, Retinoic acid-metabolizing cytochrome, CYP26B1, CYP26A2, P450RAI2

Dilution
IHC~~1:100~500
E~~N/A

Format
0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
CYP26B1 Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

CYP26B1 Antibody (internal region) - Protein Information

Name CYP26B1

Synonyms CYP26A2, P450RAI2

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:10823918, PubMed:22020119). 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:10823918). Hydroxylation of atRA limits its biological activity and initiates a degradative process leading to its eventual elimination (PubMed:10823918, PubMed:22020119). Involved in the convertion of atRA to all-trans-4-oxo-RA. 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). Shows preference for the following substrates: atRA > 9-cis-RA > 13-cis-RA (PubMed:10823918, PubMed:22020119). Plays a central role in germ cell development: acts by degrading RAs in the developing testis, preventing STRA8 expression, thereby leading to delay of meiosis. Required for the maintenance of the undifferentiated state of male germ cells during embryonic development in Sertoli cells, inducing arrest in G0 phase of the cell cycle and preventing meiotic entry. Plays a role in skeletal development, both at the level of patterning and in the ossification of bone and the establishment of some synovial joints (PubMed:22019272). Essential for postnatal survival (By similarity).

Cellular Location
Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:O43174}; Peripheral membrane protein {ECO:0000250|UniProtKB:O43174}. Microsome membrane {ECO:0000250|UniProtKB:O43174}; Peripheral membrane protein {ECO:0000250|UniProtKB:O43174}

Tissue Location
Highly expressed in brain, particularly in the cerebellum and pons.

CYP26B1 Antibody (internal region) - 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

CYP26B1 Antibody (internal region) - Images

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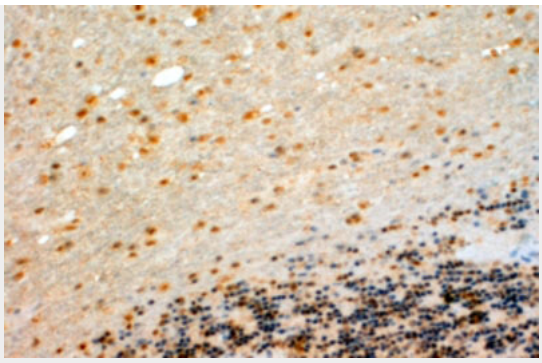

AF2543a (4 µg/ml) staining of paraffin embedded Human Cerebellum. Steamed antigen retrieval with Tris/EDTA buffer pH 9, HRP-staining.

CYP26B1 Antibody (internal region) - References

Retinoid signaling determines germ cell fate in mice. Bowles J, Knight D, Smith C, Wilhelm D, Richman J, Mamiya S, Yashiro K, Chawengsaksophak K, Wilson MJ, Rossant J, Hamada H, Koopman P. Science. 2006 Apr 28;312(5773):596-600. Epub 2006 Mar 30. PMID: 16574820