

CYP26B1 Antibody (C-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7994b**Specification**

CYP26B1 Antibody (C-term) - Product Information

Application	WB, IHC-P,E
Primary Accession	O9NR63
Other Accession	G3V7X8 , O811W2
Reactivity	Human
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	57513
Antigen Region	398-430

CYP26B1 Antibody (C-term) - Additional Information**Gene ID** 56603**Other Names**

Cytochrome P450 26B1, 114--, Cytochrome P450 26A2, Cytochrome P450 retinoic acid-inactivating 2, Cytochrome P450RAI-2, Retinoic acid-metabolizing cytochrome, CYP26B1, CYP26A2, P450RAI2

Target/Specificity

This CYP26B1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 398-430 amino acids from the C-terminal region of human CYP26B1.

Dilution

WB~~1:1000

IHC-P~~1:10~50

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

CYP26B1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CYP26B1 Antibody (C-term) - 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 conversion 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

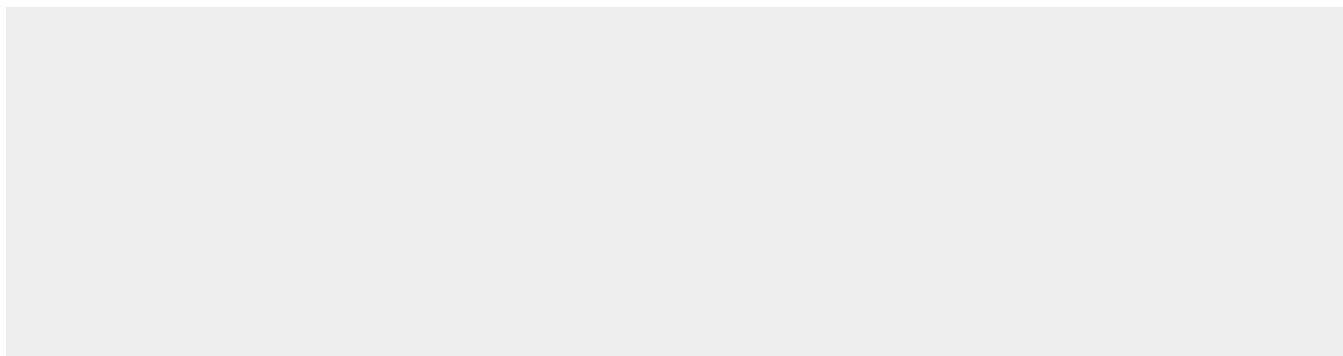
Highly expressed in brain, particularly in the cerebellum and pons.

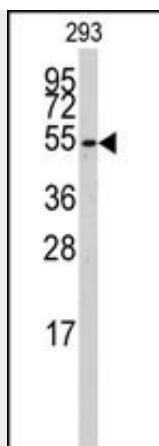
CYP26B1 Antibody (C-term) - Protocols

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

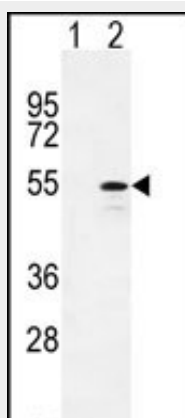
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CYP26B1 Antibody (C-term) - Images





Western blot analysis of anti-CYP26B1 Antibody (C-term) (Cat.#AP7994b) in 293 cell line lysates (35ug/lane). CYP26B1 (arrow) was detected using the purified Pab.



Western blot analysis of CYP26B1 (arrow) using rabbit polyclonal CYP26B1 Antibody (C-term) (Cat. #AP7994b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the CYP26B1 gene.



Formalin-fixed and paraffin-embedded human brain tissue reacted with CYP26B1 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.

CYP26B1 Antibody (C-term) - Background

CYP26B1 is a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases that catalyze many reactions involved in drug metabolism and the

synthesis of cholesterol, steroids and other lipids. The enzyme encoded by this gene is involved in the specific inactivation of all-trans-retinoic acid to hydroxylated forms, such as 4-oxo-, 4-OH-, and 18-OH-all-trans-retinoic acid.

CYP26B1 Antibody (C-term) - References

Bowles,J., Science 312 (5773), 596-600 (2006)
Nelson,D.R., Pharmacogenetics 14 (1), 1-18 (2004)