

CYP26B1 Polyclonal Antibody
Catalog # AP74005**Specification****CYP26B1 Polyclonal Antibody - Product Information**

Application	WB
Primary Accession	O9NR63
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal

CYP26B1 Polyclonal Antibody - Additional Information**Gene ID** 56603**Other Names**

CYP26B1 CYP26A2 P450RAI2

Dilution

WB~~WB 1:500-2000, ELISA 1:10000-20000

Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions

-20°C

CYP26B1 Polyclonal Antibody - 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](http://www.uniprot.org/citations/10823918)), PubMed: [22020119](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/10823918)).

Hydroxylation of atRA limits its biological activity and initiates a degradative process leading to its eventual elimination (PubMed: [10823918](http://www.uniprot.org/citations/10823918), PubMed: [22020119](http://www.uniprot.org/citations/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

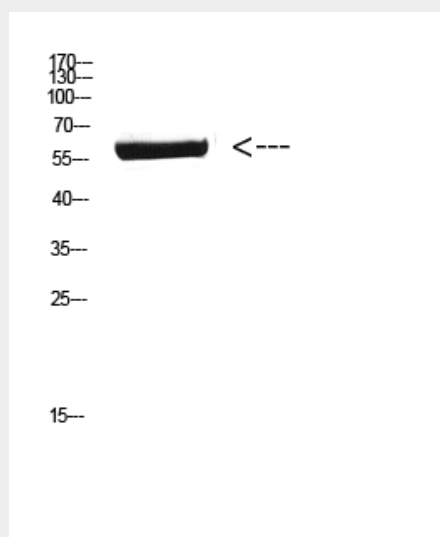
Highly expressed in brain, particularly in the cerebellum and pons.

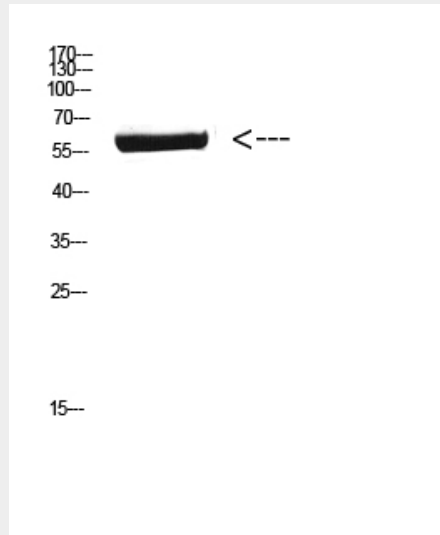
CYP26B1 Polyclonal Antibody - Protocols

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

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

CYP26B1 Polyclonal Antibody - Images





CYP26B1 Polyclonal Antibody - Background

Involved in the metabolism of retinoic acid (RA), rendering this classical morphogen inactive through oxidation. Involved in the specific inactivation of all-trans-retinoic acid (all-trans-RA), with a preference for the following substrates: all-trans-RA > 9-cis-RA > 13-cis-RA. Generates several hydroxylated forms of RA, including 4-OH-RA, 4-oxo-RA, and 18-OH- RA. Essential for postnatal survival. Plays a central role in germ cell development: acts by degrading RA 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.