

Cytochrome P450 3A7 Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51915**Specification**

Cytochrome P450 3A7 Antibody - Product Information

Application	WB
Primary Accession	P24462
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	57 KDa
Antigen Region	211 - 270

Cytochrome P450 3A7 Antibody - Additional Information**Gene ID** 100861540;1551**Other Names**

Cytochrome P450 3A7, CYP11A7, Cytochrome P450-HFLA, CYP3A7

Target/Specificity

KLH conjugated synthetic peptide derived from human Cytochrome P450 3A7

Dilution

WB~~ 1:2000

Format

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Cytochrome P450 3A7 Antibody - Protein Information**Name** CYP3A7 {ECO:0000303|PubMed:17178770, ECO:0000312|HGNC:HGNC:2640}**Function**

A cytochrome P450 monooxygenase involved in the metabolism of steroid hormones and vitamins during embryogenesis (PubMed:9555064, PubMed:11093772, PubMed:14559847, PubMed:12865317, PubMed:17178770). Mechanistically, uses molecular oxygen inserting one oxygen atom into a substrate, and reducing the second into a water molecule, with two electrons provided by NADPH via cytochrome P450 reductase (NADPH-- hemoprotein reductase) (PubMed:9555064, PubMed:11093772, PubMed:14559847, PubMed:12865317, PubMed:17178770).

href="http://www.uniprot.org/citations/11093772" target="_blank">11093772, PubMed:14559847, PubMed:12865317, PubMed:17178770). Catalyzes the hydroxylation of carbon-hydrogen bonds. Metabolizes 3beta- hydroxyandrost-5-en-17-one (dehydroepiandrosterone, DHEA), a precursor in the biosynthesis of androgen and estrogen steroid hormones (PubMed:9555064, PubMed:17178770). Exhibits high catalytic activity for the formation of hydroxysteroids from estrone (E1), particularly D- ring hydroxylated estrone at the C16-alpha position (PubMed:14559847, PubMed:12865317). Mainly hydroxylates all trans-retinoic acid (atRA) to 4-hydroxyretinoate and may play a role in atRA clearance during fetal development (PubMed:11093772). Also involved in the oxidative metabolism of xenobiotics including anticonvulsants (PubMed:9555064).

Cellular Location

Endoplasmic reticulum membrane; Peripheral membrane protein. Microsome membrane; Peripheral membrane protein

Tissue Location

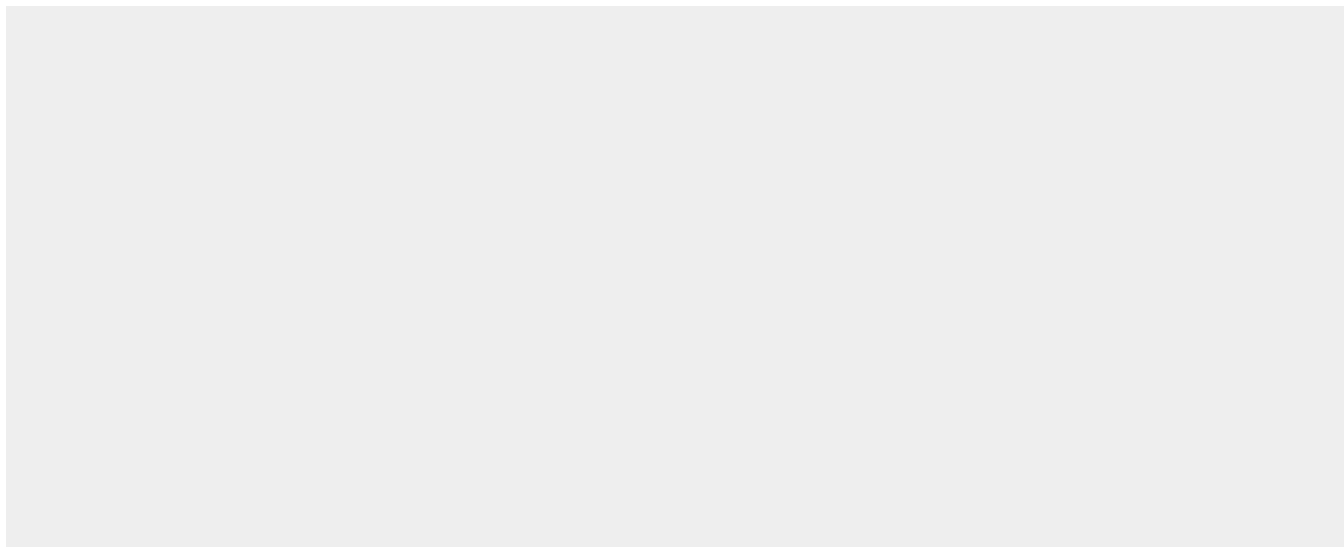
Expressed in fetal liver (at protein level).

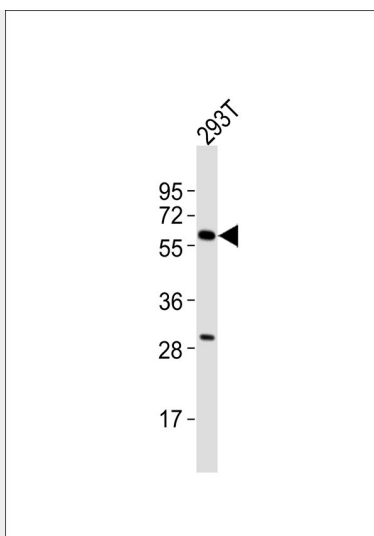
Cytochrome P450 3A7 Antibody - Protocols

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](#)

Cytochrome P450 3A7 Antibody - Images





Anti-Cytochrome P450 3A7 Antibody at 1:2000 dilution + 293T whole cell lysates. Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 58 kDa. Blocking/Dilution buffer: 5% NFDM/TBST.

Cytochrome P450 3A7 Antibody - Background

Cytochromes P450 are a group of heme-thiolate monooxygenases. In liver microsomes, this enzyme is involved in an NADPH-dependent electron transport pathway. It oxidizes a variety of structurally unrelated compounds, including steroids, fatty acids, and xenobiotics.

Cytochrome P450 3A7 Antibody - References

- Komori M., et al. J. Biochem. 105:161-163(1989).
- Gellner K., et al. Pharmacogenetics 11:111-121(2001).
- Scherer S.W., et al. Science 300:767-772(2003).
- Mural R.J., et al. Submitted (SEP-2005) to the EMBL/GenBank/DBJ databases.
- Wrighton S.A., et al. Arch. Biochem. Biophys. 268:144-151(1989).