

CYP3A7 Polyclonal Antibody
Catalog # AP69414**Specification****CYP3A7 Polyclonal Antibody - Product Information**

Application	WB
Primary Accession	P24462
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal

CYP3A7 Polyclonal Antibody - Additional Information**Gene ID** 100861540;1551**Other Names**

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

Dilution

WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications.

Format

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

Storage Conditions

-20°C

CYP3A7 Polyclonal 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). 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

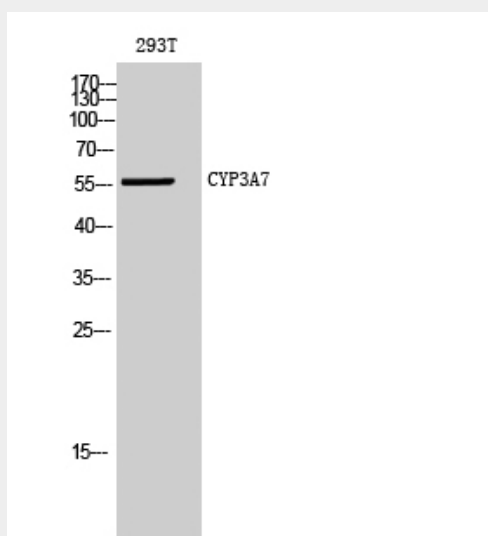
Expressed in fetal liver (at protein level).

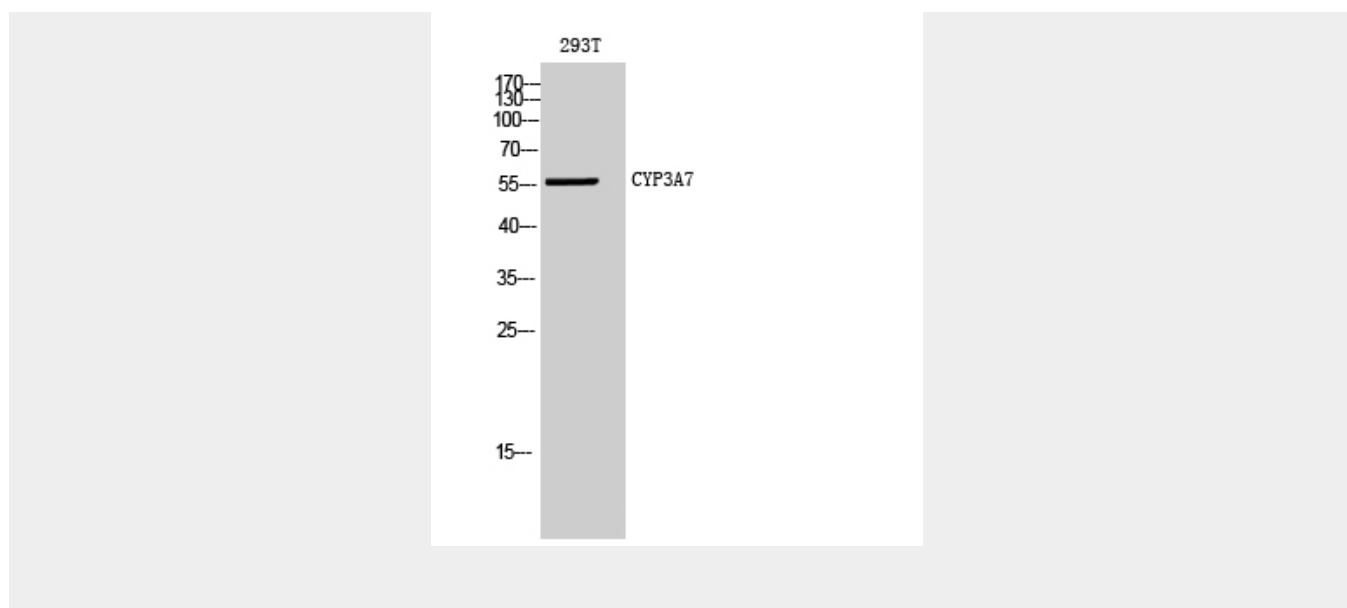
CYP3A7 Polyclonal Antibody - Protocols

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](#)

CYP3A7 Polyclonal Antibody - Images





CYP3A7 Polyclonal 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.