

Recombinant Human CYP3A7 Protein (Pro344-Asp497), His tagged

Cat. No. CYP3A7-1904H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human CYP3A7 (Pro344-Asp497) fused with His tag was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	Pro344-Asp497
Description	A cytochrome P450 monooxygenase involved in the metabolism of steroid hormones and vitamins during embryogenesis. 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--hemo protein reductase). 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. Exhibits high catalytic activity for the formation of hydroxyestrogens from estrone (E1), particularly D-ring hydroxylated estrone at the C16-alpha position. Mainly hydroxylates all trans-retinoic acid (atRA) to 4-hydroxyretinoate and may play a role in atRA clearance during fetal development. Also involved in the oxidative metabolism of xenobiotics including anticonvulsants.
Form	Lyophilized powder/frozen liquid

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Molecular Mass	19.13 kDa
Purity	>90% as determined by SDS-PAGE
Notes	For research use only.
Storage	Use a manual defrost freezer and avoid repeated freeze thaw cycles. Store at 2 to 8 centigrade for one week. Store at -20 to -80 centigrade for twelve months from the date of receipt.
Storage Buffer	Supplied as solution form in PBS, pH 7.5 or lyophilized from PBS, pH 7.5.
Reconstitution	Reconstitute in sterile water for a stock solution.
Shipping	They are shipped out with dry ice/blue ice unless customers require otherwise.

GENE INFORMATION

Gene Name	CYP3A7 cytochrome P450, family 3, subfamily A, polypeptide 7 [Homo sapiens (human)]
Official Symbol	CYP3A7
Synonyms	CYP3A7; cytochrome P450, family 3, subfamily A, polypeptide 7; cytochrome P450, subfamily IIIA, polypeptide 7; cytochrome P450 3A7; CP37; P450 HFLA; cytochrome P450-HFLA; microsomal monooxygenase; xenobiotic monooxygenase; aryl hydrocarbon hydroxylase; flavoprotein-linked monooxygenase; CYP11A7; P450-HFLA;
Gene ID	1551

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mRNA Refseq	NM_000765
Protein Refseq	NP_000756
MIM	605340
UniProt ID	P24462

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