

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

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

## SPECIFICATION

<b>Product Overview</b>	Recombinant human CYP3A7 (Pro344-Asp497) fused with His tag was expressed in E. coli.
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>ProteinLength</b>	Pro344-Asp497
<b>Description</b>	<p>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.</p>
<b>Form</b>	Lyophilized powder/frozen liquid

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<b>Molecular Mass</b>	19.13 kDa
<b>Purity</b>	>90% as determined by SDS-PAGE
<b>Notes</b>	For research use only.
<b>Storage</b>	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.
<b>Storage Buffer</b>	Supplied as solution form in PBS, pH 7.5 or lyophilized from PBS, pH 7.5.
<b>Reconstitution</b>	Reconstitute in sterile water for a stock solution.
<b>Shipping</b>	They are shipped out with dry ice/blue ice unless customers require otherwise.

## GENE INFORMATION

<b>Gene Name</b>	CYP3A7 cytochrome P450, family 3, subfamily A, polypeptide 7 [ Homo sapiens (human) ]
<b>Official Symbol</b>	CYP3A7
<b>Synonyms</b>	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; CYP3A7; P450-HFLA;
<b>Gene ID</b>	1551

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mRNA Refseq	NM_000765
Protein Refseq	NP_000756
MIM	605340
UniProt ID	P24462

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