

## Active Recombinant Human CYP3A7 Protein

**Cat. No.** CYP3A7-83H    **Lot. No.** (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant human CYP3A7 protein and CYP-reductase without tag were coexpressed in E. coli.
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>Description</b>	This gene encodes a member of the cytochrome P450 superfamily of enzymes, which participate in drug metabolism and the synthesis of cholesterol, steroids and other lipids. This enzyme hydroxylates testosterone and dehydroepiandrosterone 3-sulphate, which is involved in the formation of estriol during pregnancy. This gene is part of a cluster of related genes on chromosome 7q21.1. Naturally-occurring readthrough transcription occurs between this gene and the downstream CYP3A51P pseudogene and is represented by GenelD:100861540.
<b>Bio-activity</b>	<p>Cytochrome c Reductase Activity: 102 nmol/min/mg protein</p> <p>P450 Activity Data(Unless otherwise stated, all assays are carried out at 37 centigrade in 100 mM potassium phosphate buffer (pH 7.4) containing 5mM magnesium chloride and an NADPH generating system [5 mM glucose 6-phosphate, 1 mM NADP+, 1 U/ml glucose 6-phosphate dehydrogenase])</p> <p>Activity: Testosterone 6β-hydroxylase</p> <p>Linear with time up to: 30 min(Determined at 32 μM substrate, using a P450 concentration of 50 pmol/ml)</p> <p>Linear with P450 up to: 125 pmol/ml(Determined at 32 μM substrate, using an</p>

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	incubation time of 10 min) Vmax: 1.1 pmol/min/pmol CYP Km: 13 $\mu$ M
<b>Usage</b>	For laboratory (research) purposes only
<b>Storage</b>	Store at -80 centigrade. Avoid frequent temperature changes. Thaw on ice.
<b>Concentration</b>	P450 Concentration: 2.0 nmol/ml Cytochrome b5 Concentration: 9.9 nmol/ml Protein Concentration: 31.3 mg/ml Specific P450 Content: 64 pmol/mg protein
<b>Storage Buffer</b>	50 mM Tris-acetate (pH 7.6), 250 mM sucrose, 0.25 mM EDTA
<b>GENE INFORMATION</b>	
<b>Gene Name</b>	CYP3A7 cytochrome P450 family 3 subfamily A member 7 [ Homo sapiens (human) ]
<b>Official Symbol</b>	CYP3A7
<b>Synonyms</b>	CYP3A7; cytochrome P450 family 3 subfamily A member 7; CP37; CYP11A7; P450HLp2; P450-HFLA; P-450111A7; P-450(HFL33); cytochrome P450 3A7; aryl hydrocarbon hydroxylase; cytochrome P450, family 3, subfamily A, polypeptide 7; cytochrome P450, subfamily IIIA, polypeptide 7; cytochrome P450-HFLA; flavoprotein-linked monooxygenase; microsomal monooxygenase; xenobiotic monooxygenase
<b>Gene ID</b>	1551
<b>mRNA Refseq</b>	NM_000765

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**Protein Refseq** [NP\\_000756](#)

**MIM** [605340](#)

**UniProt ID** [P24462](#)

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