

Active Recombinant Human CYP3A7 Protein

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

SPECIFICATION

Product Overview	Recombinant human CYP3A7 protein and CYP-reductase without tag were coexpressed in E. coli.
Species	Human
Source	E.coli
Description	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 GeneID:100861540.
Bio-activity	Cytochrome c Reductase Activity: 102 nmol/min/mg protein 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]) Activity: Testosterone 6β-hydroxylase Linear with time up to: 30 min(Determined at 32 μM substrate, using a P450 concentration of 50 pmol/ml) Linear with P450 up to: 125 pmol/ml(Determined at 32 μM substrate, using an

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	incubation time of 10 min) Vmax: 1.1 pmol/min/pmol CYP Km: 13 μ M
Usage	For laboratory (research) purposes only
Storage	Store at -80 centigrade. Avoid frequent temperature changes. Thaw on ice.
Concentration	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
Storage Buffer	50 mM Tris-acetate (pH 7.6), 250 mM sucrose, 0.25 mM EDTA
GENE INFORMATION	
Gene Name	CYP3A7 cytochrome P450 family 3 subfamily A member 7 [Homo sapiens (human)]
Official Symbol	CYP3A7
Synonyms	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
Gene ID	1551
mRNA Refseq	NM_000765

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Protein Refseq	NP_000756
MIM	605340
UniProt ID	P24462

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