



# Recombinant Rat Cholesterol 7-alpha-monooxygenase (Cyp7a1)

<b>Product Code</b>	CSB-MP006460RA
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	P18125
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Rattus norvegicus (Rat)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	MMTISLIWGI AVLVSCCIWF IVGIRRRKAG EPPL ENGLIP YLGCALKFGS NPLEFLRANQ RKHGHVFTCK LMGKYVHFIT NSLSYHKVLC HGKYFDWKKF HYTTSAKAFG HRSIDPNDGN TTENINNTFT KTLQGDALCS LSEAMMQNLQ SVMRPPGLPK SKSNAWVTEG MYAFCYRVMF EAGYLTLFGR DISKTDQKA LILNNLDNFK QFDQVFPALV AGLPIHLFKT AHKAREKLAE GLKHKNLCVR DQVSELIRLR MFLNDTLSTF DDMEKAKTHL AILWASQANT IPATFWSLFQ MIRSPEAMKA ASEEVSGALQ SAGQELSSGG SAIYLDQVQL NDLPVLDSII KEALRLSSAS LNIRTAKEDF TLHLEDGSYN IRKDDMIALY PQLMHLDP EI YDPDLTFKYD RYLDESGKAK TTFYSNGNKL KCFYMPFGSG ATICPGRLFA VQEIKQFLIL MLSCFELEFV ESQVKCPPLD QSRAGLGILP PLHDIEFKYK LKH
<b>Source</b>	Mammalian cell
<b>Target Names</b>	Cyp7a1
<b>Protein Names</b>	Recommended name: Cholesterol 7-alpha-monooxygenase EC= 1.14.13.17 Alternative name(s): CYPVII Cholesterol 7-alpha-hydroxylase Cytochrome P450 7A1
<b>Expression Region</b>	1-503
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	full length protein
<b>Target Details</b>	This gene encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. This endoplasmic reticulum membrane protein catalyzes the first reaction in the cholesterol catabolic pathway in the liver, which converts cholesterol to bile acids. This reaction is the rate limiting step and the major site of regulation of bile acid synthesis, which is the primary mechanism for the removal of cholesterol from the body.
<b>Reconstitution</b>	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final



concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

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**Shelf Life**

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.

Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.