

## Product datasheet for **TP311019M**

### **CYP7A1 (NM\_000780) Human Recombinant Protein**

#### **Product data:**

<b>Product Type:</b>	Recombinant Proteins
<b>Description:</b>	Recombinant protein of human cytochrome P450, family 7, subfamily A, polypeptide 1 (CYP7A1), 100 µg
<b>Species:</b>	Human
<b>Expression Host:</b>	HEK293T
<b>Expression cDNA Clone or AA Sequence:</b>	>RC211019 protein sequence <b>Red</b> =Cloning site <b>Green</b> =Tags(s)

MMTTSLIWGIAIAACCCLWLILGIRRRQTGEPPLENGLIPYLGICALQFGANPLEFLRANQRKHGHVFTCK  
LMGKYVHFITNPLSYHKVLCCHGKYFDWKKFHFATSAKAFGHRSIDPMDGNTTENINDTFIKTLQGHALNS  
LTESMMENLQRIMRPPVSSNSKTAAWVTEGMYSFCYRVMFEAGYLTIFGRDLRRDTQKAHILNNDLNFK  
QFDKVFALVAGLPIHMFRTAHNAREKLAESLRHENLQKRESISELISLRMFLNNDTLSTFDDLEKAKTHL  
VVLWASQANTIPATFWSLQFQIRNPEAMKAATEEVKRTLENAGQKVSLEGNPICLSQAELNDLPVLSII  
KESLRLSSASLNIRTAKEDFTLHLEDGSYNIRKDDIIALYPQLMHLDPFIYDPPLTFKYDRYLDENGKTK  
TTFYCNGLKLKYYYMPFGSGATICPGRFLFAIHEIKQFLILMSYFELELIEGQAKCPPLDQSRAGLGILP  
PLNDIEFKYKFKHL

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

<b>Tag:</b>	C-Myc/DDK
<b>Predicted MW:</b>	57.5 kDa
<b>Concentration:</b>	>0.05 µg/µL as determined by microplate BCA method
<b>Purity:</b>	> 80% as determined by SDS-PAGE and Coomassie blue staining
<b>Buffer:</b>	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
<b>Preparation:</b>	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
<b>Note:</b>	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
<b>Storage:</b>	Store at -80°C.



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**Stability:** Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.

**RefSeq:** [NP\\_000771](#)

**Locus ID:** 1581

**UniProt ID:** [P22680](#)

**RefSeq Size:** 2875

**Cytogenetics:** 8q12.1

**RefSeq ORF:** 1512

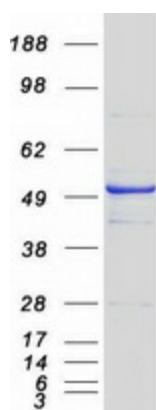
**Synonyms:** CP7A; CYP7; CYPVII

**Summary:** 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. Polymorphisms in the promoter of this gene are associated with defects in bile acid synthesis. [provided by RefSeq, Feb 2010]

**Protein Families:** Druggable Genome, ES Cell Differentiation/IPS, P450, Transmembrane

**Protein Pathways:** Metabolic pathways, PPAR signaling pathway, Primary bile acid biosynthesis

### Product images:



Coomassie blue staining of purified CYP7A1 protein (Cat# [TP311019]). The protein was produced from HEK293T cells transfected with CYP7A1 cDNA clone (Cat# [RC211019]) using MegaTran 2.0 (Cat# [TT210002]).