

Product datasheet for PH311019

CYP7A1 (NM_000780) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	CYP7A1 MS Standard C13 and N15-labeled recombinant protein (NP_000771)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC211019
Predicted MW:	57.7 kDa
Protein Sequence:	>RC211019 protein sequence Red=Cloning site Green=Tags(s)

MMTSLIWGIAIAACCCLWLILGIRRRQTGEPPEENGLIPYLGICALQFGANPLEFLRANQRKHGHVFTCK
LMGKYVHFITNPLSYHKVLCCHGKYFDWKKFHFATSAKAFGHRSIDPMDGNTTENINDTFIKTLQGHALNS
LTESMMENLQRIMRPPVSSNSKTAAWVTEGMYSFCYRVMFEAGYLTIIFGRDLTRRDTQKAHILNNDLNFK
QFDKVPALVAGLPIHMFRTAHNAREKLAESLRHENLQKRESISELISLRMFLNDLSTFDDLEKAKTHL
VVLWASQANTIPATFWSLQFQIRNPEAMKAATEEVKRTLENAGQKVSLEGNPICLSQAEFLNDLPVLDSDII
KESLRLSSASLNIRTAKEFTLHLEDGSYNIRKDDIIALYPQLMHLDPDIYPDPLTFKYDRYLDENGKTK
TTFYCNGLKLKYYMPFGSGATICPGRLFATHEIKQFLILMLSYFELELIEGQAKCPPLDQSRAGLGILP
PLNDIEFKYKFKHL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	<u>NP_000771</u>
RefSeq Size:	2875
RefSeq ORF:	1512



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Synonyms: CP7A; CYP7; CYPVII

Locus ID: 1581

UniProt ID: [P22680](#)

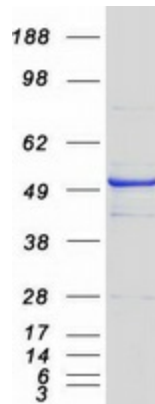
Cytogenetics: 8q12.1

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]).