



# Human CYP7A1 peptide (DAG-P1493)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Antigen Description</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. Polymorphisms in the promoter of this gene are associated with defects in bile acid synthesis. [provided by RefSeq, Feb 2010]
<b>Specificity</b>	Detected in liver.
<b>Purity</b>	70 - 90% by HPLC.
<b>Conjugate</b>	Unconjugated
<b>Sequence Similarities</b>	Belongs to the cytochrome P450 family.
<b>Format</b>	Liquid
<b>Preservative</b>	None
<b>Storage</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

## GENE INFORMATION

<b>Gene Name</b>	<a href="#">CYP7A1 cytochrome P450, family 7, subfamily A, polypeptide 1 [ Homo sapiens (human) ]</a>
<b>Official Symbol</b>	CYP7A1
<b>Synonyms</b>	CYP7A1; cytochrome P450, family 7, subfamily A, polypeptide 1; CP7A; CYP7; CYPVII;

cholesterol 7-alpha-monooxygenase; cytochrome P450 7A1; cholesterol 7-alpha-hydroxylase;  
cytochrome P450, subfamily VIIA polypeptide 1;

<b>Entrez Gene ID</b>	<a href="#">1581</a>
<b>mRNA Refseq</b>	<a href="#">NM_000780.3</a>
<b>Protein Refseq</b>	<a href="#">NP_000771.2</a>
<b>UniProt ID</b>	P22680
<b>Chromosome Location</b>	8q11-q12
<b>Pathway</b>	Bile acid and bile salt metabolism, organism-specific biosystem; Bile acid biosynthesis, cholesterol => cholate, organism-specific biosystem; Bile acid biosynthesis, cholesterol => cholate, conserved biosystem; Bile secretion, organism-specific biosystem; Bile secretion, conserved biosystem; Biological oxidations, organism-specific biosystem; Cytochrome P450 - arranged by substrate type, organism-specific biosystem; Drug Induction of Bile Acid Pathway, organism-specific biosystem; Endogenous ste
<b>Function</b>	cholesterol 7-alpha-monooxygenase activity; heme binding; iron ion binding;