



Human CYP11A1 peptide (DAG-P0372)

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

PRODUCT INFORMATION

Antigen Description	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 protein localizes to the mitochondrial inner membrane and catalyzes the conversion of cholesterol to pregnenolone, the first and rate-limiting step in the synthesis of the steroid hormones. Two transcript variants encoding different isoforms have been found for this gene. The cellular location of the smaller isoform is unclear since it lacks the mitochondrial-targeting transit peptide. [provided by RefSeq, Jul 2008]
Purity	70 - 90% by HPLC.
Conjugate	Unconjugated
Sequence Similarities	Belongs to the cytochrome P450 family.
Format	Liquid
Preservative	None
Storage	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

Gene Name	CYP11A1 cytochrome P450, family 11, subfamily A, polypeptide 1 [Homo sapiens (human)]
Official Symbol	CYP11A1
Synonyms	CYP11A1; cytochrome P450, family 11, subfamily A, polypeptide 1; CYP11A; CYPXIA1; P450SCC; cholesterol side-chain cleavage enzyme, mitochondrial; steroid 20-22-lyase; cytochrome P450 11A1; cytochrome P450(scc); cytochrome P450C11A1; cholesterol 20-22

desmolase; cholesterol monooxygenase (side-chain cleaving); cytochrome P450, subfamily XIA (cholesterol side chain cleavage);

Entrez Gene ID	1583
mRNA Refseq	NM_000781.2
Protein Refseq	NP_000772.2
UniProt ID	P05108
Chromosome Location	15q23-q24
Pathway	Biological oxidations, organism-specific biosystem; Corticotropin-releasing hormone, organism-specific biosystem; Cytochrome P450 - arranged by substrate type, organism-specific biosystem; Endogenous sterols, organism-specific biosystem; Glucocorticoid andamp; Mineralcorticoid Metabolism, organism-specific biosystem; Metabolism, organism-specific biosystem; Metabolism of lipids and lipoproteins, organism-specific biosystem; Metabolism of steroid hormones and vitamin D, organism-specific biosyste
Function	cholesterol binding; cholesterol monooxygenase (side-chain-cleaving) activity; cholesterol monooxygenase (side-chain-cleaving) activity; heme binding; iron ion binding;