

Recombinant Human CYP3A4

Cat. No. CYP3A4-26688TH **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant full length Human Cytochrome P450 3A4 protein with an N terminal proprietary tag; predicted MW: 81.4 kDa.
Species	Human
Source	Wheat Germ
ProteinLength	503 amino acids
Description	This gene encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases that catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. This protein localizes to the endoplasmic reticulum and its expression is induced by glucocorticoids and some pharmacological agents. This enzyme is involved in the metabolism of approximately half the drugs in use today, including acetaminophen, codeine, cyclosporin A, diazepam and erythromycin. The enzyme also metabolizes some steroids and carcinogens. This gene is part of a cluster of cytochrome P450 genes on chromosome 7q21.1. Previously another CYP3A gene, CYP3A3, was thought to exist; however, it is now thought that this sequence represents a transcript variant of CYP3A4. Alternatively spliced transcript variants encoding different isoforms have been identified.
Molecular Weight	81.400kDa
Tissue specificity	Expressed in prostate and liver. According to some authors, it is not expressed in

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

brain (PubMed:19094056). According to others, weak levels of expression are measured in some brain locations (PubMed:19359404 and PubMed:18545703). Also expressed in epithe

Form Liquid

Purity Proprietary Purification

Storage buffer pH: 8.00 Constituents: 0.3% Glutathione, 0.79% Tris HCl

Storage Shipped on dry ice. Upon delivery aliquot and store at -80oC. Avoid freeze / thaw cycles.

Sequences of amino acids

MALIPDLAMETWLLLA VSLVLLYLYGTHSHGLFKKLGIPG PTPLPFLGNILSYHKGFC
MFDMECHKKYGKVWGFYDGQQP VLAITDPDMIKTVLVKECYSVFTNRRPFGPVGF
MKSAISI AEDEEWKRLRSLLSPTFTSGKLEKEMVPIIAQYGDVLVRNL RREAETGKPV
TLKDVFGAYSMDVITSTSFGVNIDSLNNPQ DPFVENTKKLLRFDLDPFFLSITVPFL
IPILEVLCV FPREVTNFLRKSVMKESRLED TQKHRVDFLQLMID SQN SKETES
HKALSDLELVAQSIIFAGYETTSSVLSFIMYE LATHPDVQQKLQEEIDAVLPNKAPP
TYDTVLQMEYLDMMV NETLRLFPIAMRLERVCKKDVEINGMFIPKGVVVMIPSYA LH
RDPKYWTEPEKFLPERFSKKNKDNI DPYIYTPFGSGPR NCIGMRFALMNMKLALIRV
LQNFSPKPKETQIPLKLSLG GLLQPEKPVVLKVESRDGTVSGA

Sequence Similarities Belongs to the cytochrome P450 family.

GENE INFORMATION

Gene Name CYP3A4 cytochrome P450, family 3, subfamily A, polypeptide 4 [Homo sapiens]

Official Symbol CYP3A4

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Synonyms	CYP3A4; cytochrome P450, family 3, subfamily A, polypeptide 4; CYP3A3, cytochrome P450, subfamily IIIA (naphedipine oxidase), polypeptide 4; cytochrome P450 3A4;
Gene ID	1576
mRNA Refseq	NM_001202855
Protein Refseq	NP_001189784
MIM	124010
Uniprot ID	P08684
Chromosome Location	7q21.1
Pathway	Bile secretion, organism-specific biosystem; Bile secretion, conserved biosystem; Biological oxidations, organism-specific biosystem; Codeine and morphine metabolism, organism-specific biosystem; Cytochrome P450 - arranged by substrate type, organism-specific biosystem;
Function	albendazole monooxygenase activity; caffeine oxidase activity; electron carrier activity; enzyme binding; heme binding;