

# Recombinant Human CYP3A4

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

## SPECIFICATION

|                           |   |
|---------------------------|---|
| <b>Product Overview</b>   | Recombinant full length Human Cytochrome P450 3A4 protein with an N terminal proprietary tag; predicted MW: 81.4 kDa.   |
| <b>Species</b>            | Human   |
| <b>Source</b>             | Wheat Germ  |
| <b>ProteinLength</b>      | 503 amino acids   |
| <b>Description</b>        | <p>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.</p> |
| <b>Molecular Weight</b>   | 81.400kDa   |
| <b>Tissue specificity</b> | 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](mailto: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**

MALIPDLAMETWLLLAVSLVLLYLYGTHSHGLFKKLGIPG PTPLPFLGNILSYHKGFC  
MFDMECHKKYGKVWGFYDGGQP VLAITDPMIKTVLVKECYSVFTNRRPFGPVG  
MKS AISI AEDEEWKRLRSLLSPTFTSGKLEKEMVPIIAQYGDVLRNL RREAETGKPV  
TLKDVF GAYSMDVITSTSTSGVNI DSNLPQ DPFVENTKLLRFDLDPFFLSITVFPFL  
IPILEV LNICV FPREVTN FLRKS VKRMKESRLED TQKHRVDFLQLMID SQN SKETES  
HKALSDLELVAQSIIFAGYETTSSVLSFIMYE LATHPDVQQKLQEEIDAVLPNKAPP  
TYD TVLQMEYLD MVV NETLRLFP IAMRLERVCKKDVEINGMFIPKGVVVMIPSYA LH  
RDPKYWTEPEKFLPERFSKKNKDNIDPYIYTPFGSGPR NCIGMRFALMNMKLALIRV  
LQNFSFKPKKETQIPLKLSLG 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](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

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

|                            |  |
|----------------------------|--|
| <b>Synonyms</b>            | CYP3A4; cytochrome P450, family 3, subfamily A, polypeptide 4; CYP3A3, cytochrome P450, subfamily IIIA (niphedipine oxidase), polypeptide 4; cytochrome P450 3A4;  |
| <b>Gene ID</b>             | 1576   |
| <b>mRNA Refseq</b>         | NM_001202855   |
| <b>Protein Refseq</b>      | NP_001189784   |
| <b>MIM</b>                 | 124010   |
| <b>Uniprot ID</b>          | P08684   |
| <b>Chromosome Location</b> | 7q21.1   |
| <b>Pathway</b>             | 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; |
| <b>Function</b>            | albendazole monooxygenase activity; caffeine oxidase activity; electron carrier activity; enzyme binding; heme binding;  |

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

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

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