

Recombinant Human CYP3A4, His-tagged

Cat. No. CYP3A4-11784H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human CYP3A4 protein, fused to His-tag, was expressed in E.coli and purified by Ni-sepharose.
Species	Human
Source	E.coli
ProteinLength	154-503a.a.
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.
Storage	The protein is stored in PBS buffer at -20°C. Avoid repeated freezing and thawing cycles.

 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

Storage Buffer

1M PBS (58mM Na₂HPO₄, 17mM NaH₂PO₄, 68mM NaCl, pH8.) added with 300mM Imidazole and 0.7% Sarcosyl, 15% glycerol.

GENE INFORMATION
Gene Name

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

Official Symbol

CYP3A4

Synonyms

CYP3A4; cytochrome P450, family 3, subfamily A, polypeptide 4; CYP3A3, cytochrome P450, subfamily IIIA (nifedipine oxidase), polypeptide 4; cytochrome P450 3A4; nifedipine oxidase; cytochrome P450 3A3; cytochrome P450 HLP; cytochrome P450-PCN1; cytochrome P450 NF-25; albendazole sulfoxidase; quinine 3-monooxygenase; albendazole monooxygenase; P450-III, steroid inducible; glucocorticoid-inducible P450; taurochenodeoxycholate 6- α -hydroxylase; cytochrome P450, subfamily IIIA (nifedipine oxidase), polypeptide 3; cytochrome P450, subfamily IIIA (nifedipine oxidase), polypeptide 4; HLP; CP33; CP34; CYP3A; NF-25; CYP3A3; P450C3; CYP3A3; CYP3A4; P450PCN1; MGC126680;

Gene ID

1576

mRNA Refseq

NM_001202855

Protein Refseq

NP_001189784

MIM

124010

UniProt ID

P08684

**Chromosome
Location**

7q21.1

 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

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; Drug metabolism - cytochrome P450, organism-specific biosystem; Drug metabolism - cytochrome P450, conserved biosystem;
Function	albendazole monooxygenase activity; caffeine oxidase activity; electron carrier activity; enzyme binding; heme binding; iron ion binding; metal ion binding; monooxygenase activity; monooxygenase activity; oxidoreductase activity; oxidoreductase activity,

 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