

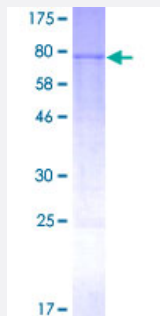
Full-Length

CYP3A4 (Human) Recombinant Protein (P01)

Catalog # H00001576-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human CYP3A4 full-length ORF (AA101632.1, 1 a.a. - 503 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MALIPDLAMETWLLLA VSLVLLYL YGTHSHGLFKKLGIPGPTPLPFLGNILSYHKGFCMFDMECHKK
YGVWGFYDGGQPVLAITDPDMIKTVLVKECYSVFTNRRPFGPVGFMKSAISIAEDEEWKRLRSL
SPTFTSGKLKEMVPIIAQYGDVLRNLRREAETGKPVTLKDVFAGYSMDVITSTSFGVNIDSLNNPQ
DPFVENTKKLLRFDLDPFFLSITVPFLIPLEVLNLCVFPREVTNFLRKS VKRMKESRLED TQKHR
VDFLQLMDSQNSKETESHKALSDLELVAQSIIIFAGYETTSSVLSFIMYELATHPDVQQKLQEEID
AVLPNKAPPTYDTVLQMEYLD MVVNETLRLFP IAMRLERVCKKDVEINGMFIPKGVVVMIPSYALH
RDPKYWTEPEKFLPERFSKKNKD NIDPYITPFGSGPRNCIGMRFALMNMKLALIRVLQNF SFKPC
KETQIPLKLSLGGLLQPEKPVVLKVESRDGT VSGA

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

83.7

Interspecies Antigen Sequence

Rat (72)

Preparation Method

[in vitro wheat germ expression system](#)

Purification

Glutathione Sepharose 4 Fast Flow

Quality Control Testing

12.5% SDS-PAGE Stained with Coomassie Blue.

Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — CYP3A4

Entrez GeneID	1576
GeneBank Accession#	BC101631.1
Protein Accession#	AAI01632.1
Gene Name	CYP3A4
Gene Alias	CP33, CP34, CYP3A, CYP3A3, HLP, MGC126680, NF-25, P450C3, P450PCN1
Gene Description	cytochrome P450, family 3, subfamily A, polypeptide 4
Omim ID	124010
Gene Ontology	Hyperlink

Gene Summary	This gene, CYP3A4, 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 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 which are used 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. [provided by RefSeq]
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Other Designations

P450-III, steroid inducible|cytochrome P450, subfamily IIIA (nifedipine oxidase), polypeptide 3|cytochrome P450, subfamily IIIA (nifedipine oxidase), polypeptide 4|cytochrome P450, subfamily II IA, polypeptide 4|glucocorticoid-inducible P450|nifedipine o

Pathway

- [Drug metabolism - cytochrome P450](#)
- [Drug metabolism - other enzymes](#)
- [gamma-Hexachlorocyclohexane degradation](#)
- [Linoleic acid metabolism](#)
- [Metabolic pathways](#)
- [Metabolism of xenobiotics by cytochrome P450](#)
- [Retinol metabolism](#)

Disease

- [Acquired Immunodeficiency Syndrome](#)
- [Acute Disease](#)
- [Adenocarcinoma](#)
- [Adenoma](#)
- [Akathisia](#)
- [Anemia](#)
- [Asthma](#)
- [Balkan Nephropathy](#)
- [Body Weight](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Carcinoma](#)

- [Cardiovascular Diseases](#)
- [Central Nervous System Diseases](#)
- [Cholestasis](#)
- [Chronic Disease](#)
- [Colorectal Neoplasms](#)
- [Coronary Artery Disease](#)
- [Coronary Disease](#)
- [Depressive Disorder](#)
- [Diabetes Mellitus](#)
- [Diarrhea](#)
- [Disease Progression](#)
- [Disease Susceptibility](#)
- [Drug Hypersensitivity](#)
- [Drug Toxicity](#)
- [Drug-Induced Liver Injury](#)
- [Dyskinesia](#)
- [Dyslipidemias](#)
- [Edema](#)
- [Endometrial Neoplasms](#)
- [Epidermal Necrolysis](#)
- [Epilepsy](#)
- [Esophageal Neoplasms](#)
- [Exanthema](#)
- [Femur Head Necrosis](#)
- [Gastritis](#)
- [Gastrointestinal Stromal Tumors](#)

- [Genetic Predisposition to Disease](#)
- [Gilbert Disease](#)
- [Glomerulonephritis](#)
- [Head and Neck Neoplasms](#)
- [Helicobacter Infections](#)
- [Hepatitis](#)
- [Hepatitis C](#)
- [Heroin Dependence](#)
- [HIV Infections](#)
- [HIV Seropositivity](#)
- [Hodgkin Disease](#)
- [Hyperbilirubinemia](#)
- [Hypercholesterolemia](#)
- [Hyperlipidemias](#)
- [Hypertension](#)
- [Hypopharyngeal Neoplasms](#)
- [Inflammation](#)
- [Kidney Diseases](#)
- [Kidney Failure](#)
- [Kidney Neoplasms](#)
- [Laryngeal Neoplasms](#)
- [Leukemia](#)
- [Leukopenia](#)
- [Liver Cirrhosis](#)
- [Liver Failure](#)

- [Liver Neoplasms](#)
- [Long QT syndrome](#)
- [Lung carcinoma](#)
- [Lung Neoplasms](#)
- [Lymphatic Metastasis](#)
- [Lymphoma](#)
- [Malaria](#)
- [Metabolic Syndrome X](#)
- [Migraine Disorders](#)
- [Mouth Neoplasms](#)
- [Multiple Myeloma](#)
- [Muscular Diseases](#)
- [Myelodysplastic Syndromes](#)
- [Myocardial Infarction](#)
- [Nasopharyngeal Neoplasms](#)
- [Nausea](#)
- [Neoplasm Invasiveness](#)
- [Neoplasm Metastasis](#)
- [Neoplasms](#)
- [Neutropenia](#)
- [Obesity](#)
- [Occupational Diseases](#)
- [Oligospermia](#)
- [Opioid-Related Disorders](#)
- [Osteonecrosis](#)
- [Osteoporosis](#)
- [Ovarian cancer](#)

- [Ovarian Failure](#)
- [Ovarian Neoplasms](#)
- [Pain](#)
- [Peptic Ulcer](#)
- [Pharyngeal Neoplasms](#)
- [Poisoning](#)
- [Polycystic Ovary Syndrome](#)
- [Precancerous Conditions](#)
- [Pregnancy Complications](#)
- [Prostate cancer](#)
- [Prostatic Hyperplasia](#)
- [Prostatic Neoplasms](#)
- [Psychiatric Status Rating Scales](#)
- [Puberty](#)
- [Recurrence](#)
- [Satiation](#)
- [Schizophrenia](#)
- [Schizophrenic Psychology](#)
- [Skin Neoplasms](#)
- [Stevens-Johnson Syndrome](#)
- [Stomach Neoplasms](#)
- [Testicular Neoplasms](#)
- [Thrombocytopenia](#)
- [Thrombophilia](#)
- [Tobacco Use Disorder](#)
- [Urinary Bladder Neoplasms](#)

- [Urogenital Neoplasms](#)
- [Vomiting](#)