

Full-Length

CYP3A5 (Human) Recombinant Protein (P01)

Catalog # H00001577-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human CYP3A5 full-length ORF (AAH33862, 1 a.a. - 502 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MDLIPNLAVETWLLLAVSLVLLYL YGTRTHGLFKRLGIPGPTPLPLLGNVLSYRQGLWKFDTECYKK
YGKMWGTYEGQLPVLAITDPDVIRTVLVKECYSVFTNRRSLGPVGFMKSAISLAEDEEWKRIRSL
SPTFTSGKLKEMFPIIAQYGDVLRNLRREAEGKPVTLKDIFGAYSMDVITGTSFGVNIDSLNNPQ
DPFVESTKKFLKFGFLDPLFLSIILFPFLTPVFEALNVSLFPKDTINFLSKSVNRMKKSRLNDKQKH
RLDFLQLMDSQNSKETESHKALSDLELAAQSIIFIFAGYETTSSVLSFTLYELATHPDVQQKLQKEI
DAVLPNKAPPTYDAVVQMEYLDMMVNETLRLFPVAIRLERTCKKDVEINGVFIPKGSMMVVIPTYALH
HDPKYWTEPEEFRPERFSKKKDSIDPYITPFGTGPRNCIGMRFALNMNKLALIRVLQNFSFKPCK
ETQIPLKLDLTQGLLQPEKPMVKVDSRDGTLSGE

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

80.96

Interspecies Antigen Sequence

Mouse (70); 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 — CYP3A5

Entrez GeneID	1577
GeneBank Accession#	BC033862
Protein Accession#	AAH33862
Gene Name	CYP3A5
Gene Alias	CP35, P450PCN3, PCN3
Gene Description	cytochrome P450, family 3, subfamily A, polypeptide 5
Omim ID	145500 605325
Gene Ontology	Hyperlink

Gene Summary	This gene, CYP3A5, 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. The enzyme metabolizes drugs such as nifedipine and cyclosporine as well as the steroid hormones testosterone, progesterone and androstenedione. This gene is part of a cluster of cytochrome P450 genes on chromosome 7q21.1. This cluster includes a pseudogene, CYP3A5P1, which is very similar to CYP3A5. This similarity has caused some difficulty in determining whether cloned sequences represent the gene or the pseudogene. [provided by RefSeq]
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Other Designations

aryl hydrocarbon hydroxylase|cytochrome P-450|cytochrome P450, subfamily IIIA (naphthalene oxidase), polypeptide 5|flavoprotein-linked monooxygenase|microsomal monooxygenase|naphthalene oxidase|xenobiotic monooxygenase

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](#)
- [Anemia](#)
- [Atherosclerosis](#)
- [Balkan Nephropathy](#)
- [Body Weight](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Cadaver](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)

- [Central Nervous System Diseases](#)
- [Colon cancer](#)
- [Colorectal Neoplasms](#)
- [Coronary Artery Disease](#)
- [Coronary Disease](#)
- [Diabetes Mellitus](#)
- [Diarrhea](#)
- [Disease Progression](#)
- [DNA Damage](#)
- [Drug Toxicity](#)
- [Drug-Induced Liver Injury](#)
- [Dyskinesia](#)
- [Edema](#)
- [Epilepsy](#)
- [Esophageal Neoplasms](#)
- [Exanthema](#)
- [Gastrointestinal Stromal Tumors](#)
- [Genetic Predisposition to Disease](#)
- [Gilbert Disease](#)
- [Head and Neck Neoplasms](#)
- [Hemorrhage](#)
- [Hepatitis](#)
- [Hepatitis B](#)
- [HIV Infections](#)
- [Hot Flashes](#)
- [Hyperbilirubinemia](#)

- [Hypercholesterolemia](#)
- [Hyperlipidemias](#)
- [Hypertension](#)
- [Hypertrophy](#)
- [Inflammation](#)
- [Kidney Diseases](#)
- [Kidney Failure](#)
- [Kidney Neoplasms](#)
- [Leukemia](#)
- [Leukopenia](#)
- [Liver Neoplasms](#)
- [Lung carcinoma](#)
- [Lung Neoplasms](#)
- [Lupus Nephritis](#)
- [Lymphatic Metastasis](#)
- [Lymphoma](#)
- [Macular Degeneration](#)
- [Malaria](#)
- [Mental Disorders](#)
- [Miosis](#)
- [Multiple Chemical Sensitivity](#)
- [Multiple Myeloma](#)
- [Muscular Diseases](#)
- [Myelodysplastic Syndromes](#)
- [Myocardial Infarction](#)
- [Nasopharyngeal Neoplasms](#)

- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Neovascularization](#)
- [Neutropenia](#)
- [Opioid-Related Disorders](#)
- [Ovarian cancer](#)
- [Ovarian Failure](#)
- [Ovarian Neoplasms](#)
- [Postoperative Complications](#)
- [Precancerous Conditions](#)
- [Pregnancy Complications](#)
- [Prostate cancer](#)
- [Prostatic Hyperplasia](#)
- [Prostatic Neoplasms](#)
- [Psychiatric Status Rating Scales](#)
- [Psychomotor Performance](#)
- [Psychotic Disorders](#)
- [Pulmonary Disease](#)
- [Recurrence](#)
- [Schizophrenia](#)
- [Skin Neoplasms](#)
- [Stomach Neoplasms](#)
- [Stroke](#)
- [Taste](#)
- [Testicular Neoplasms](#)

- [Thrombosis](#)
- [Urinary Bladder Neoplasms](#)
- [Urogenital Neoplasms](#)
- [Urologic Neoplasms](#)