

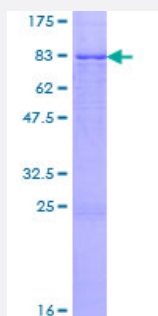
Full-Length

CYP1A2 (Human) Recombinant Protein (P01)

Catalog # H00001544-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human CYP1A2 full-length ORF (AAH67427.1, 1 a.a. - 516 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MALSQSVPFSAPELLLASAIFCLVFWLKGRLPRVPKGLKSPPEPWGWPLLGHVLTGKNPHLA
LSRMSQRYGDVLQIRIDSTPVLVLSRLDTIRQALVRQGDDFKGRPDLYTSTLITDGGSLTFSTDSGP
VWAARRRLAQNALNTFSIASDPASSSSCYEEHVSKEAKALISRLQELMAGPGHFDPYNQVVVS
VANVIGAMCFGQHFPESSDEMLSLVKNTHFVETASSGNPLDFFPILRYLPNPALQRFKAFNQRF
LWFLQKTVQEHYQDFDKNSVRDITGALFKHKKGPRASGNLIPQEKMNLVNDIFGAGFDVTTAIS
WSLMYLVTKEIQRKIQKELDTVIGRERRPRLSDRPQLPYLEAFILETFRHSSFLPFTIPHSTTRDTTL
NGFYIPKKCCVFVNQWQVNHDPPELWEDPSEFRPERFLTADGTAINKPLSEKMMLFGMGKRRICIG
EVLAKWEIFLFLAILLQQLEFSVPPGVKVDLTPIYGLTMKHARCEHVQARLRFSIN

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

84.9

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 — CYP1A2

Entrez GeneID[1544](#)**GeneBank Accession#**[BC067427.1](#)**Protein Accession#**[AAH67427.1](#)**Gene Name**

CYP1A2

Gene Alias

CP12, P3-450, P450(PA)

Gene Description

cytochrome P450, family 1, subfamily A, polypeptide 2

Omim ID[124060](#)**Gene Ontology**[Hyperlink](#)**Gene Summary**

This gene 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. The protein encoded by this gene localizes to the endoplasmic reticulum and its expression is induced by some polycyclic aromatic hydrocarbons (PAHs), some of which are found in cigarette smoke. The enzyme's endogenous substrate is unknown; however, it is able to metabolize some PAHs to carcinogenic intermediates. Other xenobiotic substrates for this enzyme include caffeine, aflatoxin B1, and acetaminophen. The transcript from this gene contains four Alu sequences flanked by direct repeats in the 3' untranslated region. [provided by RefSeq]

Other Designations

P450 form 4|aryl hydrocarbon hydroxylase|cytochrome P450, subfamily I (aromatic compound-inducible), polypeptide 2|dioxin-inducible P3-450|flavoprotein-linked monooxygenase|microsomal monooxygenase|xenobiotic monooxygenase

Pathway

- [Caffeine metabolism](#)
- [Drug metabolism - cytochrome P450](#)
- [Linoleic acid metabolism](#)
- [Metabolic pathways](#)
- [Metabolism of xenobiotics by cytochrome P450](#)
- [Retinol metabolism](#)
- [Tryptophan metabolism](#)

Disease

- [Abortion](#)
- [Adenocarcinoma](#)
- [Adenoma](#)
- [Amyotrophic lateral sclerosis](#)
- [Arrhythmia](#)
- [Arthritis](#)
- [Asthma](#)
- [Attention](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Cell Transformation](#)
- [Cholangiocarcinoma](#)
- [Chromosome Deletion](#)

- [Chronic Disease](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Cocarcinogenesis](#)
- [Cognition](#)
- [Colonic Polyps](#)
- [Colorectal Neoplasms](#)
- [Coronary Artery Disease](#)
- [Cryptorchidism](#)
- [Depressive Disorder](#)
- [Diabetes Mellitus](#)
- [Diarrhea](#)
- [Drug Hypersensitivity](#)
- [Drug Toxicity](#)
- [Ductus Arteriosus](#)
- [Dyskinesia](#)
- [Dyskinesias](#)
- [Edema](#)
- [Endometrial Neoplasms](#)
- [Epidermal Necrolysis](#)
- [Epilepsy](#)
- [Esophageal Neoplasms](#)
- [Exanthema](#)
- [Genetic Predisposition to Disease](#)
- [Genomic Instability](#)
- [Gilbert Disease](#)

- [Head and Neck Neoplasms](#)
- [Hepatitis C](#)
- [Hyperbilirubinemia](#)
- [Hypercholesterolemia](#)
- [Hypertension](#)
- [Infant](#)
- [Insulin Resistance](#)
- [Kidney Failure](#)
- [Kidney Neoplasms](#)
- [Laryngeal Neoplasms](#)
- [Liver Cirrhosis](#)
- [Liver Diseases](#)
- [Liver Neoplasms](#)
- [Long QT syndrome](#)
- [Lung Neoplasms](#)
- [Lymphoma](#)
- [Macular Degeneration](#)
- [Mental Disorders](#)
- [Mesothelioma](#)
- [Migraine Disorders](#)
- [Mouth Neoplasms](#)
- [Myocardial Infarction](#)
- [Nausea](#)
- [Neoplasms](#)
- [Neural Tube Defects](#)
- [Obesity](#)

- [Opioid-Related Disorders](#)
- [Ovarian cancer](#)
- [Ovarian Failure](#)
- [Ovarian Neoplasms](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Parkinson disease](#)
- [Pharyngeal Neoplasms](#)
- [Pleural Neoplasms](#)
- [Poisoning](#)
- [Polycystic Ovary Syndrome](#)
- [Porphyria](#)
- [Porphyria Cutanea Tarda](#)
- [Pregnancy Complications](#)
- [Prenatal Exposure Delayed Effects](#)
- [Prostate cancer](#)
- [Prostatic Neoplasms](#)
- [Pruritus](#)
- [Psychiatric Status Rating Scales](#)
- [Puberty](#)
- [Pulmonary Disease](#)
- [Schizophrenia](#)
- [Schizophrenic Psychology](#)
- [Seminoma](#)
- [Stevens-Johnson Syndrome](#)

- [Stomach Neoplasms](#)
- [Stroke](#)
- [Substance-Related Disorders](#)
- [Testicular Neoplasms](#)
- [Thrombophilia](#)
- [Thrombosis](#)
- [Tobacco Use Disorder](#)
- [Urinary Bladder Neoplasms](#)
- [Urologic Neoplasms](#)
- [Vomiting](#)
- [Weight Gain](#)