

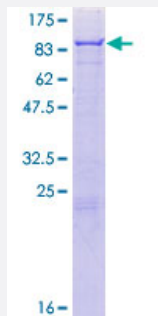
Full-Length

ALOX5 (Human) Recombinant Protein (P01)

Catalog # H00000240-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human ALOX5 full-length ORF (NP_000689.1, 1 a.a. - 674 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MPSYTVTVATGSQWFAGTDDYMLSLVGSAGCSEKHLLDKPFYNDFERGAVDSDYDVTVDDEELGEI
QLVRIEKRYWLNDDWYLKYITLKTTPHGDYIEFPCYRWITGDVEVVLRDGRAKLARDDQIHILKQHR
RKELETRQKQYRWMEWNPGFPLSIDAKCHKDLPRDIQFDSEKGVDFVLNYSKAMENLFINRFMH
MFQSSWNDFADFEKIFVKISNTISERVNMHWQEDLMFGYQFLNGCNPVLIRRCTELPEKLPVTTE
MVECSLERQLSLEQEVQQGNIFVDFELLDGIDANKTDPCTLQFLAAPICLLYKNLANKIVPIAQLNQ
IPGDENPIFLPSDAKYDWLLAKIWVRSSDFHVVHQTITHLLRTHLVSEVFGIAMYRQLPAVHPIFKLLV
AHVRFTIAINTKAREQLICECGLFDKANATGGGGHVQMVQGRAMKDLTYASLCFPEAIKARGMESK
EDIPYYFYRDDGLLVWEAIRFTAEVVDIYEGDQVVEEDPELQDFVNDVYVYGMGRGRKSSGFPK
SVKSREQLSEYLTVVIFTASAQHAADVNFQGYDWCWIPNAPPTMRAPPPTAKGVVTIEQVDTLPD
RGRSCWHLGAVWALSQFQENELFLGMYPEEHFIEKPVKEAMARFRKNLEAMSVIAERNKKKQLP
YYLSPDRIPNSVAI

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

104.4

Interspecies Antigen Sequence

Mouse (93)

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 — ALOX5

Entrez GeneID	240
GeneBank Accession#	NM_000698.2
Protein Accession#	NP_000689.1
Gene Name	ALOX5
Gene Alias	5-LO, 5-LOX, 5LPG, LOG5, MGC163204
Gene Description	arachidonate 5-lipoxygenase
Omim ID	152390 600807
Gene Ontology	Hyperlink

Gene Summary

This gene encodes a member of the lipoxygenase gene family and plays a dual role in the synthesis of leukotrienes from arachidonic acid. The encoded protein, which is expressed specifically in bone marrow-derived cells, catalyzes the conversion of arachidonic acid to 5(S)-hydroperoxy-6-trans-8,11,14-cis-eicosatetraenoic acid, and further to the allylic epoxide 5(S)-trans-7,9-trans-11,14-cis-eicosatetraenoic acid (leukotriene A4). Leukotrienes are important mediators of a number of inflammatory and allergic conditions. Mutations in the promoter region of this gene lead to a diminished response to antileukotriene drugs used in the treatment of asthma and may also be associated with atherosclerosis and several cancers. Alternatively spliced transcript variants have been observed, but their full-length nature has not been determined. [provided by RefSeq]

Other Designations

OTTHUMP00000019502|arachidonic acid 5-lipoxygenase|leukotriene A4 synthase

Pathway

- [Arachidonic acid metabolism](#)
- [Linoleic acid metabolism](#)
- [Metabolic pathways](#)

Disease

- [Acute Disease](#)
- [Adenocarcinoma](#)
- [Adenoma](#)
- [Adenomatous Polyps](#)
- [Alzheimer disease](#)
- [Asthma](#)
- [Atherosclerosis](#)
- [Birth Weight](#)
- [Bronchial Hyperreactivity](#)
- [Bronchiolitis](#)
- [Calcinosis](#)
- [Cardiovascular Diseases](#)
- [Carotid Artery Diseases](#)

- [Carotid Stenosis](#)
- [Cerebral Hemorrhage](#)
- [Cerebrovascular Accident](#)
- [Chronic Disease](#)
- [Colon cancer](#)
- [Colonic Neoplasms](#)
- [Colorectal Neoplasms](#)
- [Coronary Artery Disease](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Drug Hypersensitivity](#)
- [Edema](#)
- [Esophageal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Glioblastoma](#)
- [Glioma](#)
- [Hyperhomocysteinemia](#)
- [Hyperlipidemias](#)
- [Hypersensitivity](#)
- [Hypertension](#)
- [Infant](#)
- [Inflammation](#)
- [Intracranial Hemorrhages](#)
- [Kidney Diseases](#)

- [Kidney Failure](#)
- [Leukemia](#)
- [Lung Neoplasms](#)
- [Meningeal Neoplasms](#)
- [Meningioma](#)
- [Metabolic Syndrome X](#)
- [Multiple Sclerosis](#)
- [Myocardial Infarction](#)
- [Narcolepsy](#)
- [Neoplasms](#)
- [Osteoporosis](#)
- [Prostatic Neoplasms](#)
- [Pulmonary Disease](#)
- [Respiratory Syncytial Virus Infections](#)
- [Rhinitis](#)
- [Sinusitis](#)
- [Stroke](#)
- [Subarachnoid Hemorrhage](#)
- [Tuberculosis](#)
- [Urinary Bladder Neoplasms](#)
- [Urticaria](#)
- [Werner syndrome](#)