

Product datasheet for **TP317259**

5 Lipoxygenase (ALOX5) (NM_000698) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human arachidonate 5-lipoxygenase (ALOX5), 20 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC217259 representing NM_000698 Red =Cloning site Green =Tags(s)

MPSYTVTVATGSQWFAGTDDYIYLSLVGSAGCSEKHLLDKPFYNDFERGAVDSYDVTVDDEELGEIQLVRI
EKRYWLNDDWYLKYITLKTTPHGDYIEFPCYRWITGDVEVLRDGRAKLARDDQIHILKQHRRKELETRQ
KQYRWMEWNPGFPLSIDAKCHKDLPRDIQFDSEKGVDFVLNYSKAMENLFNRFMHMFQSSWVDFADFEK
IFVKISNTISERVMNHVQEDLMFGYQFLNGCNPVLIIRCTELPEKLPVTTEMVECSLERQLSLEQEVQQG
NIFIVDFELLDGIDANKTDPCTLQFLAAPICLLYKNLANKIVPIAQLNQIPGDENPIFLPSDAKYDWLL
AKIWRSSDFHVTITHLRTHLVSEVFGIAMYRQLPAVHPIFKLLVAHVRFIAINTKAREQLICECG
LFDKANATGGGGHVQMVQRAMKDLTYASLCFPEAIKARGMESKEDIPIYYFYRDDGLLVWEAIRTFTAQEVV
DIYEGDQVVEEDPELQDFVNDVYVYGMGRKSSGFPKSVKSREQLSEYLTIVIFTASAQHAAVNFGQYD
WCSWIPNAPPTMRAPPPTAKGVVTIEQIVDTLPDRGRSCWHLGAVWALSQFQENELFLGMYPEEHFIEKP
VKEAMARFRKNLEAIVSVIAERNKKKQLPYYLSPDRIPNSVAI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Predicted MW:	77.8 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.



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Stability: Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: [NP_000689](#)

Locus ID: 240

UniProt ID: [P09917](#)

RefSeq Size: 2568

Cytogenetics: 10q11.21

RefSeq ORF: 2022

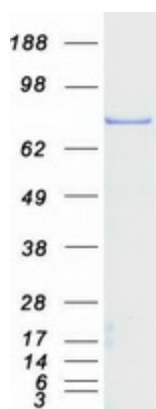
Synonyms: 5-LO; 5-LOX; 5LPG; LOG5

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 encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2012]

Protein Families: Druggable Genome

Protein Pathways: Arachidonic acid metabolism, Metabolic pathways

Product images:



Coomassie blue staining of purified ALOX5 protein (Cat# TP317259). The protein was produced from HEK293T cells transfected with ALOX5 cDNA clone (Cat# [RC217259]) using MegaTran 2.0 (Cat# [TT210002]).