

Product datasheet for PH317259

5 Lipoxygenase (ALOX5) (NM_000698) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	ALOX5 MS Standard C13 and N15-labeled recombinant protein (NP_000689)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC217259
Predicted MW:	77.8 kDa
Protein Sequence:	>RC217259 representing NM_000698 Red=Cloning site Green=Tags(s)

MPSYTVTIVATGSQWVAGTDDYIYLSLVGSAGCSEKHLLDKPFYNDFERGAVDSYDVTVDEELGEIQLVRI
EKRKYWLNDWYLYITLKTTPHGDYIEFPCYRWITGDVEVVLVDGAKLARDQIHLKQHRKELETRQ
KQYRWMENPGFPLSIDAKCHKDLPRDIQFDSEKGVDFVLNYSKAMENLFINRFMHMFQSSWNDFADFEK
IFVKISNTISERVMNHQEDLMFGYQFLNGCNPVLIRRCTELPEKLPVTTEMVECSLERQLSLEQEVQQG
NIFIVDFELLDGIDANKTDPCTLQFLAAPICLLYKNLANKIVPIAIALQNLQIPGDENPIFLPSDAKYDWLL
AKIIVWRSSDFVHQITITHLLRTHLVSEVFGIAMYRQLPAVHPIFKLLVAHVRFITIAINTKAREQLICECG
LFDKANATGGGGHVQMVQRAMKDLTYASLCPFAIKARGMESKEDIPIYFYRDDGLLVWEAIRTFTAEEV
DIYYEGDQVVEEDPELQDFVNDVYVYGMGRKSSGFPKSVKSREQLSEYLVVIFITASAQHAAVNFGQYD
WCSWIPNAPPTMRAPPPTAKGVVTIEQIVDTLPDRGRSCWHLGAVWALSQFQENELFLGMYPEEHFIEKP
VKEAMARFRKNLEAIVSVIAERNKKKQLPYYLSPDRIPNSVAI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	NP_000689
RefSeq Size:	2568



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RefSeq ORF: 2022

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

Locus ID: 240

UniProt ID: [P09917](#)

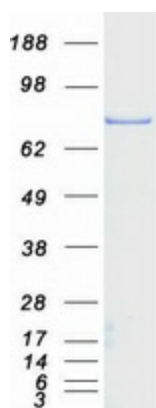
Cytogenetics: 10q11.21

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]).