

Product datasheet for TP527302

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Alox12 (NM_007440) Mouse Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Purified recombinant protein of Mouse arachidonate 12-lipoxygenase (Alox12), with C-terminal

MYC/DDK tag, expressed in HEK293T cells, 20ug

Species: Mouse

Expression Host: HEK293T

Expression cDNA

>MR227302 representing NM_007440

Clone or AA Red=Cloning site Green=Tags(s)

Sequence:

MGRYRVRVVTGAWLFSGSLNLVRLWLVGEHREAKLELQLRPARGKEEEFDFDVPEDLGPLQFVKLHKQHT VVDDAWFCNLITVQGPGTSAEAVFPCYRWVQGEGILSLPEGTARLAGDNALDVFQKYREKELKERQQTYC WATWKEGLPQTIAADCKDDLPPNMRFHEEKRLDFEWTLKAGVLEMGLKRVYTLLRSWNHLEDFDQIFWGQ KSALAEKVHQCWQEDELFGYQFLNGANPMLLRRSTSLPSRLVLPSGMEELQAQLEKELKNGSLFEADFIL LDGIPANVIRGEPQYLAAPLVMLRMDPGGKLLPMAIQIQPPNPSSPAPTLFLPSDPPLAWLLAKIWVRNS DFQLQELQFHLLNTHLVAEVIAVATMRCLPGLHPIFKLLVPHIRYTMEINTRSRTQLISDGGIFDQVVST GGGGHVQLLTRAVAQLTYHSLCPPDDLANRGLLRIPSALYARDALQLWEVTARYVKGMVHLFYQSDDIVR GDPELQAWCREITEVGLCHAQDRGFPVSFQSRAQLCHFLTMCVFTCTAQHAAINQGQLDWYGWVPNAPCT MRMPPPTSKDDVTMETVMGSLPDVQKACLQMTITWHLGRLQPDMVPLGHHTEKYFSDPRTKAVLSQFQAD

LDNLEKEITARNEQLDLPYEYLKPSRIENSITI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-MYC/DDK
Predicted MW: 75.8 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

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 after receiving vials.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and handling

conditions. Avoid repeated freeze-thaw cycles.





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RefSeq: NP 031466

Locus ID: 11684

UniProt ID: <u>P39655</u>, <u>A2CF85</u>

RefSeq Size: 2991

Cytogenetics: 11 42.99 cM

RefSeq ORF: 1989

Synonyms: 9930022G08Rik; Alox12p; P-12LO

Summary: Non-heme iron-containing dioxygenase that catalyzes the stereo-specific peroxidation of free

and esterified polyunsaturated fatty acids generating a spectrum of bioactive lipid mediators. Mainly converts arachidonic acid to (12S)-hydroperoxyeicosatetraenoic acid/(12S)-HPETE but can also metabolize linoleic acid. Has a dual activity since it also converts leukotriene A4/LTA4 into both the bioactive lipoxin A4/LXA4 and lipoxin B4/LXB4. Through the production of specific bioactive lipids like (12S)-HPETE it regulates different biological processes including platelet activation. It also probably positively regulates angiogenesis through regulation of the expression of the vascular endothelial growth factor. Plays a role in apoptotic process, promoting the survival of vascular smooth muscle cells for instance. May also play a role in the control of cell

migration and proliferation.[UniProtKB/Swiss-Prot Function]