10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Recombinant Anti-LTA4H Rabbit mAb

Catalog # AP95337

Product Information

Application	WB, IHC, FC, IF/IC
Primary Accession	P09960
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Monoclonal
Calculated MW	69285

Additional Information

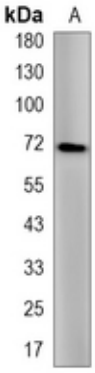
Gene ID	4048
Other Names	LTA4; Leukotriene A-4 hydrolase; LTA-4 hydrolase; Leukotriene A(4) hydrolase
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within human LTA4H protein. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 FC~~1:10~50 IF/IC~~N/A
Format	Liquid in PBS, pH 7.3, 50% glycerol, 0.05% BSA, and 0.05% Proclin300.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

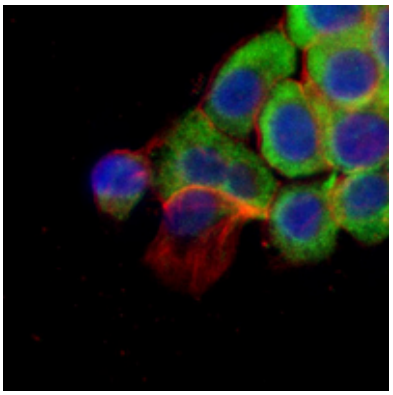
Name	LTA4H
Synonyms	LTA4
Function	Bifunctional zinc metalloenzyme that comprises both epoxide hydrolase (EH) and aminopeptidase activities. Acts as an epoxide hydrolase to catalyze the conversion of LTA4 to the pro-inflammatory mediator leukotriene B4 (LTB4) (PubMed:11917124, PubMed:12207002, PubMed:15078870, PubMed:18804029, PubMed:1897988, PubMed:1975494, PubMed:2244921, PubMed:2996528). Can utilize LTA5 less effectively as a substrate than LTA4, and produce LTB5 (PubMed:2996528). Also has aminopeptidase activity, with high affinity for N-terminal arginines of various synthetic tripeptides (PubMed:18804029, PubMed:20813919). In addition to its pro-inflammatory EH activity, may also counteract inflammation by its aminopeptidase activity, which inactivates by cleavage another neutrophil attractant, the tripeptide Pro-Gly-Pro (PGP), a bioactive fragment of collagen generated by the action of matrix metalloproteinase-9 (MMP9) and prolylendopeptidase (PREPL) (PubMed:20813919, PubMed:24591641). Involved also in the biosynthesis of resolvin E1 and 18S-resolvin E1 from eicosapentaenoic acid, two lipid

	mediators that show potent anti-inflammatory and pro-resolving actions (PubMed:21206090).
Cellular Location	Cytoplasm.
Tissue Location	Isoform 1 and isoform 2 are expressed in monocytes, lymphocytes, neutrophils, reticulocytes, platelets and fibroblasts

Images



Western blot analysis of LTA4H expression in A549 (A) whole cell lysates. (Predicted band size: 69 kD; Observed band size: 69 kD)



Immunofluorescent analysis of LTA4H staining in A549 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with an AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.