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LTA4H Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP2844b

Specification

LTA4H Antibody (C-term) Blocking Peptide - Product Information

Primary Accession P09960

LTA4H Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 4048

Other Names
Leukotriene A-4 hydrolase, LTA-4 hydrolase, Leukotriene A(4) hydrolase, LTA4H, LTA4

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP2844b was selected from the C-term region of human LTA4H. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

LTA4H Antibody (C-term) Blocking Peptide - Protein Information

Name LTA4H

Synonyms LTA4

LTA4H Antibody (C-term) Blocking Peptide - Background

DHCR24 hydrolyzes an epoxide moiety of leukotriene A4 (LTA-4) to form leukotriene B4 (LTB-4). This enzyme also has some peptidase activity.

LTA4H Antibody (C-term) Blocking Peptide - References

Bevan,S., Stroke 40 (3), 696-701 (2009)Crosslin,D.R., Hum. Genet. 125 (2), 217-229 (2009)Huston,A.L., Biochim. Biophys. Acta 1784 (11), 1865-1872 (2008)Rybina,I.V., J. Biol. Chem. 272 (50), 31865-31871 (1997)

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 proinflammatory mediator leukotriene B4 (LTB4) (PubMed:11917124, PubMed:12207002, PubMed:15078870, PubMed:18804029, PubMed:1897988, PubMed:1975494, PubMed:2244921). Has also aminopeptidase activity, with high affinity for N-terminal arginines of various synthetic tripeptides (PubMed:20813919, PubMed:18804029). In addition to its proinflammatory 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

LTA4H Antibody (C-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides