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LTA4H Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2844c

Product Information

Application	WB, IHC-P, IF, E
Primary Accession	P09960
Reactivity	Human
Predicted	Mouse, Rat, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB17402
Calculated MW	69285
Antigen Region	163-191

Additional Information

Gene ID	4048
Other Names	Leukotriene A-4 hydrolase, LTA-4 hydrolase, Leukotriene A(4) hydrolase, LTA4H, LTA4
Target/Specificity	This LTA4H antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 163-191 amino acids from the Central region of human LTA4H.
Dilution	WB~~1:1000 IHC-P~~1:100~500 IF~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	LTA4H Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

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

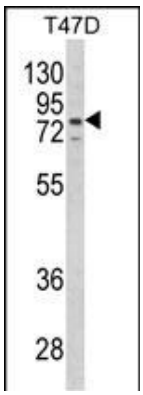
Background

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

References

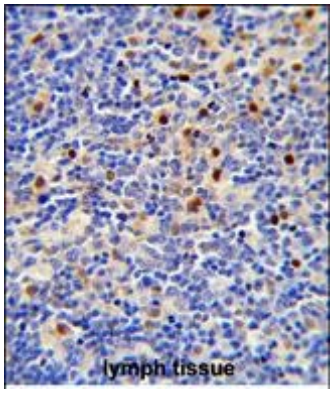
Bevan,S., Stroke 40 (3), 696-701 (2009) Crosslin,D.R., Hum. Genet. 125 (2), 217-229 (2009) Huston,A.L., Biochim. Biophys. Acta 1784 (11), 1865-1872 (2008) Rybina,I.V., J. Biol. Chem. 272 (50), 31865-31871 (1997)

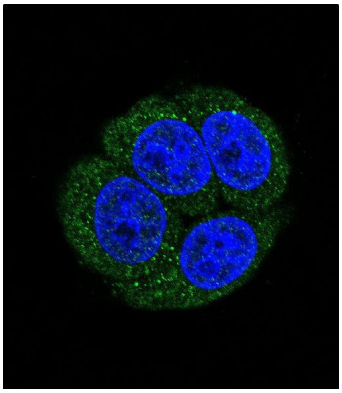
Images



Western blot analysis of LTA4H Antibody (Center) (Cat. #AP2844c) in T47D cell line lysates (35ug/lane). LTA4H (arrow) was detected using the purified Pab.

Formalin-fixed and paraffin-embedded human lymph tissue reacted with CORO1A Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.





Confocal immunofluorescent analysis of LTA4H Antibody (Center)(Cat#AP2844c) with Hela cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green).DAPI was used to stain the cell nuclear (blue).

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