

LTA4H Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP2844c

Product Information

| | |
|--------------------------|------------------------|
| Application | WB, IHC-P, IF, E |
| Primary Accession | P09960 |
| Reactivity | Human |
| 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](#)). 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

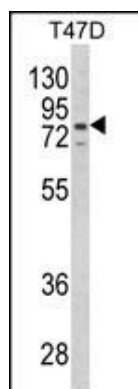
Background

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

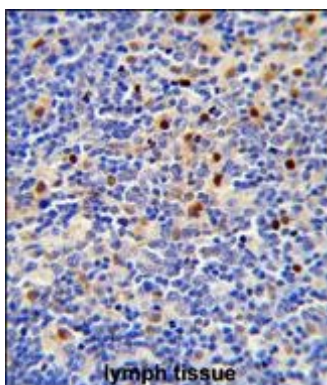
References

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)

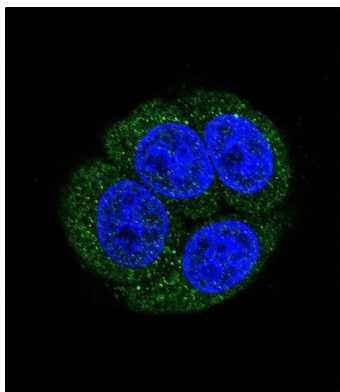
Images



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 IgG (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'.