

CHIA Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP9394a

Specification

CHIA Antibody (N-term) - Product Information

Application	
Primary Accession	
Reactivity	
Host	
Clonality	
Isotype	
Calculated MW	
Antigen Region	

FC, WB,E <u>O9BZP6</u> Human, Mouse Rabbit Polyclonal Rabbit IgG 52271 20-47

CHIA Antibody (N-term) - Additional Information

Gene ID 27159

Other Names Acidic mammalian chitinase, AMCase, Lung-specific protein TSA1902, CHIA

Target/Specificity

This CHIA antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 20-47 amino acids from the N-terminal region of human CHIA.

Dilution FC~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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

CHIA Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CHIA Antibody (N-term) - Protein Information

Name CHIA

Function Degrades chitin and chitotriose. May participate in the defense against nematodes,



fungi and other pathogens. Plays a role in T-helper cell type 2 (Th2) immune response. Contributes to the response to IL-13 and inflammation in response to IL-13. Stimulates chemokine production by pulmonary epithelial cells. Protects lung epithelial cells against apoptosis and promotes phosphorylation of AKT1. Its function in the inflammatory response and in protecting cells against apoptosis is inhibited by allosamidin, suggesting that the function of this protein depends on carbohydrate binding.

Cellular Location

[Isoform 1]: Secreted. Note=Secretion depends on EGFR activity [Isoform 3]: Cytoplasm.

Tissue Location

Detected in lung epithelial cells from asthma patients (at protein level). Highly expressed in stomach. Detected at lower levels in lung.

CHIA Antibody (N-term) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

CHIA Antibody (N-term) - Images



Western blot analysis of CHIA Antibody (N-term) (Cat. #AP9394a) in mouse liver tissue lysates (35ug/lane). CHIA (arrow) was detected using the purified Pab.





CHIA Antibody (N-term) (Cat.#AP9394a) FC analysis of ZR-75-1 cells (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

CHIA Antibody (N-term) - Background

CHIA degrades chitin and chitotriose. May participate in the defense against nematodes and other pathogens. There are 3 named isoforms produced by alternative splicing. CHIA is induced via a T helper-2 (Th2)-specific, interleukin-13-mediated pathway in epithelial cells and macrophages. CHIA may be an important mediator of IL13-induced responses in Th2-dominated disorders such as asthma. CHIA hydrolysis N-acetyl-beta-D-glucosaminide 1,4-beta-linkages in chitin and chitodextrins.

CHIA Antibody (N-term) - References

Wu, A.C., et al. J. Allergy Clin. Immunol. 125(3):754-757(2010) Ober, C., et al. Curr Opin Allergy Clin Immunol 9(5):401-408(2009) Seibold, M.A., et al. J. Biol. Chem. 284(29):19650-19658(2009) Hartl, D., et al. J. Immunol. 182(8):5098-5106(2009) Lalaker, A., et al. Am J Rhinol Allergy 23(1):8-14(2009)