

HRASLS3 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP5747a

Specification

HRASLS3 Antibody (C-term) - Product Information

Application WB, FC, E **Primary Accession** P53816 Other Accession NP 009000 Reactivity Human, Mouse Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 17937 Antigen Region 104-132

HRASLS3 Antibody (C-term) - Additional Information

Gene ID 11145

Other Names

HRAS-like suppressor 3, HRSL3, Adipose-specific phospholipase A2, AdPLA, Group XVI phospholipase A1/A2, H-rev 107 protein homolog, HRAS-like suppressor 1, HREV107-1, HREV107-3, Renal carcinoma antigen NY-REN-65, PLA2G16, HRASLS3, HREV107

Target/Specificity

This HRASLS3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 104-132 amino acids from the C-terminal region of human HRASLS3.

Dilution

WB~~1:1000 FC~~1:10~50

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

HRASLS3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

HRASLS3 Antibody (C-term) - Protein Information

Name PLAAT3 (HGNC:17825)



Function Exhibits both phospholipase A1/2 and acyltransferase activities (PubMed: 19047760, PubMed: <u>19615464</u>, PubMed: <u>22605381</u>, PubMed: <u>22825852</u>, PubMed: <u>26503625</u>). Shows phospholipase A1 (PLA1) and A2 (PLA2) activity, catalyzing the calcium-independent release of fatty acids from the sn-1 or sn-2 position of glycerophospholipids (PubMed: 19047760, PubMed: <u>19615464</u>, PubMed: <u>22605381</u>, PubMed: <u>22825852</u>, PubMed: <u>22923616</u>). For most substrates, PLA1 activity is much higher than PLA2 activity (PubMed: 19615464). Shows O-acyltransferase activity, catalyzing the transfer of a fatty acyl group from glycerophospholipid to the hydroxyl group of lysophospholipid (PubMed: 19615464). Shows N-acyltransferase activity, catalyzing the calcium-independent transfer of a fatty acyl group at the sn-1 position of phosphatidylcholine (PC) and other glycerophospholipids to the primary amine of phosphatidylethanolamine (PE), forming N- acylphosphatidylethanolamine (NAPE), which serves as precursor for N- acylethanolamines (NAEs) (PubMed: 19047760, PubMed: 19615464, PubMed: 22605381, PubMed: 22825852). Exhibits high N-acyltransferase activity and low phospholipase A1/2 activity (PubMed:22825852). Required for complete organelle rupture and degradation that occur during eye lens terminal differentiation, when fiber cells that compose the lens degrade all membrane-bound organelles in order to provide lens with transparency to allow the passage of light. Organelle membrane degradation is probably catalyzed by the phospholipase activity (By similarity).

Cellular Location

Cell membrane {ECO:0000250|UniProtKB:P53817}; Single-pass membrane protein. Cytoplasm. Cytoplasm, cytosol {ECO:0000250|UniProtKB:Q8R3U1}. Cytoplasm, perinuclear region {ECO:0000250|UniProtKB:Q8R3U1}. Peroxisome membrane {ECO:0000250|UniProtKB:Q8R3U1}; Single-pass membrane protein. Mitochondrion membrane {ECO:0000250|UniProtKB:Q8R3U1}; Single-pass membrane protein. Nucleus envelope {ECO:0000250|UniProtKB:Q8R3U1}. Lysosome membrane {ECO:0000250|UniProtKB:Q8R3U1}; Single-pass membrane protein. Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:Q8R3U1}; Single-pass membrane protein. Note=During eye lens differentiation, recruited from the cytosol to various organelles, including mitochondria, endoplasmic reticulum, nuclear envelope and lysosomes, immediately before organelle degradation. This translocation is triggered by organelle membrane damage and requires the C-terminal transmembrane domain {ECO:0000250|UniProtKB:Q8R3U1}

Tissue Location

Widely expressed. Low expression, if any, in hematopoietic cells and thymus. In testis, confined to round spermatids. Expressed in normal ovarian epithelial cells. Down- regulated in some ovarian carcinomas and testicular germ cell tumors Highly expressed in white adipose tissue (PubMed:19136964)

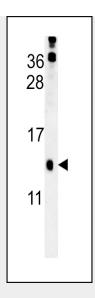
HRASLS3 Antibody (C-term) - Protocols

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

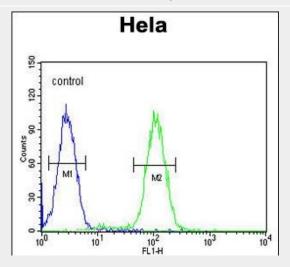
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

HRASLS3 Antibody (C-term) - Images





HRASLS3 Antibody (C-term) (Cat. #AP5747a) western blot analysis in mouse kidney tissue lysates (15ug/lane). This demonstrates the HRASLS3 antibody detected HRASLS3 protein (arrow).



HRASLS3 Antibody (C-term) (Cat. #AP5747a) flow cytometric analysis of Hela cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

HRASLS3 Antibody (C-term) - Background

PLA2G16 specifically catalyzes the release of fatty acids from phospholipids in adipose tissue. It also has a weak lysophospholipase activity (By similarity). Tumor suppressor that may be involved in interferon-dependent cell death.

HRASLS3 Antibody (C-term) - References

Uyama, T., et al. Biochim. Biophys. Acta 1791(12):1114-1124(2009) Duncan, R.E., et al. J. Biol. Chem. 283(37):25428-25436(2008) Nazarenko, I., et al. J. Cell. Sci. 120 (PT 8), 1393-1404 (2007) Nazarenko, I., et al. Am. J. Pathol. 169(4):1427-1439(2006)