

Hrasls3 Rabbit pAb

Hrasls3 Rabbit pAb Catalog # AP94744

Product Information

Application IHC-P, IHC-F, IF

Primary Accession

Reactivity

Host

Clonality

Calculated MW

Physical State

Q8R3U1

Mouse

Rabbit

Polyclonal

17872

Liquid

Immunogen KLH conjugated synthetic peptide derived from the middle of mouse Hrasls3

Epitope Specificity 8-100/162 **Isotype** IgG

Purity affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Membrane; Single-pass membrane protein (Potential). Cytoplasm. Cytoplasm,

perinuclear region.

SIMILARITY Belongs to the H-rev107 family.

SUBUNIT Interacts with PPP2R1A; this interaction might decrease PP2A activity.

Important Note This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

Background Descriptions HRASLS3 specifically catalyzes the release of fatty acids from phospholipids in

adipose tissue and also has a weak lysophospholipase activity. It is a tumor

suppressor that may be involved in interferon-dependent cell death.

Additional Information

Gene ID 225845

Other Names Phospholipase A and acyltransferase 3, Plaat3

{ECO:0000250 | UniProtKB:P53816}

Target/Specificity Ubiquitously expressed in normal tissues but down-regulated in primary

carcinomas or in many cell lines derived from tumors. Highly expressed in white adipose tissue and in adipocytes. Expressed at lower levels in brown

adipose tissue.

Dilution IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500

Format 0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

Storage Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

Protein Information

Name

Plaat3 {ECO:0000250 | UniProtKB:P53816}

Function

Exhibits both phospholipase A1/2 and acyltransferase activities (PubMed: 19047760, PubMed: 37919452). Shows phospholipase A1 (PLA1) and A2 (PLA2), catalyzing the calcium-independent release of fatty acids from the sn-1 or sn-2 position of glycerophospholipids (PubMed: 18614531, PubMed:19047760, PubMed:19136964, PubMed:22134920). For most substrates, PLA1 activity is much higher than PLA2 activity (By similarity). Shows O-acyltransferase activity, catalyzing the transfer of a fatty acyl group from glycerophospholipid to the hydroxyl group of lysophospholipid (By similarity). 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). Exhibits high N-acyltransferase activity and low phospholipase A1/2 activity (By similarity). 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 (PubMed: 33854238). Organelle membrane degradation is probably catalyzed by the phospholipase activity (PubMed:33854238).

Cellular Location

Cell membrane {ECO:0000250 | UniProtKB:P53817}; Single-pass membrane protein. Cytoplasm. Cytoplasm, cytosol. Cytoplasm, perinuclear region. Peroxisome membrane; Single-pass membrane protein. Mitochondrion membrane; Single-pass membrane protein. Nucleus envelope. Lysosome membrane; Single-pass membrane protein. Endoplasmic reticulum membrane; 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

Tissue Location

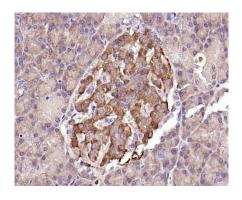
Ubiquitously expressed in normal tissues but down- regulated in primary carcinomas or in many cell lines derived from tumors (PubMed:12055182). Highly expressed in white adipose tissue and in adipocytes (PubMed:18614531, PubMed:19136964). Expressed at lower levels in brown adipose tissue (PubMed:18614531, PubMed:19136964)

Background

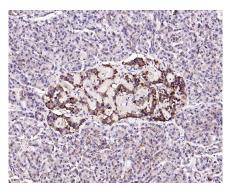
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Images

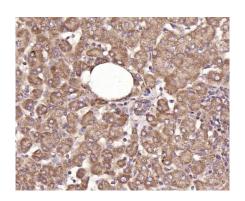
Paraformaldehyde-fixed, paraffin embedded (rat pancreas); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer



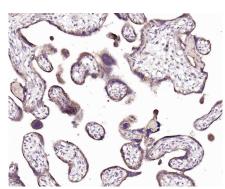
(normal goat serum) at 37°C for 30min; Incubation with (Hrasls3) Polyclonal Antibody, Unconjugated (b AP94744) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



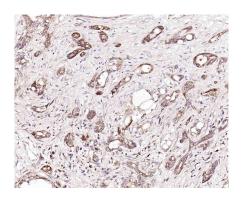
Paraformaldehyde-fixed, paraffin embedded (human pancreas); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Incubation with (Hrasls3) Polyclonal Antibody, Unconjugated (b AP94744) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (human liver); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Incubation with (Hrasls3) Polyclonal Antibody, Unconjugated (b AP94744) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (human placenta); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Incubation with (Hrasls3) Polyclonal Antibody, Unconjugated (b AP94744) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (human pancreatic cancer); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Incubation with (Hrasls3) Polyclonal Antibody, Unconjugated (b AP94744) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

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