10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

SRAC1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10801b

Specification

SRAC1 Antibody (C-term) - Product Information

Application	**IHC-P, WB,E**
Primary Accession	Q96JX3
Other Accession	Q3U213, Q2TBM9, NP_116250.2
Reactivity	**Human, Mouse**
Predicted	**Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**74147**
Antigen Region	**552-581**

SRAC1 Antibody (C-term) - Additional Information

Gene ID 84947

Other Names
Protein SERAC1, Serine active site-containing protein 1, SERAC1

Target/Specificity
This SRAC1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 552-581 amino acids from the C-terminal region of human SRAC1.

Dilution
IHC-P~~1:50~100
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
SRAC1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

SRAC1 Antibody (C-term) - Protein Information

Name SERAC1

Function Facilitates the transport of serine from the cytosol to the mitochondria by interacting with and stabilizing Sideroflexin-1 (SFXN1), a mitochondrial serine transporter, playing a fundamental role in the one-carbon cycle responsible for the synthesis of nucleotides needed for mitochondrial DNA replication (PubMed:35235340). Plays an important role in the phosphatidylglycerol (PG) remodeling that is essential for both mitochondrial function and intracellular cholesterol trafficking (PubMed:22683713). Specifically involved in the exchange of the sn-1 acyl chain from PG 16:0/18:1(9Z) (also known as 1-hexadecanoyl-2-(9Z-octadecenoyl)-sn-glycero-3-phospho-(1'-sn-glycerol)) to PG 18:0/18:1(9Z) (also known as 1-octadecanoyl-2-(9Z-octadecenoyl)- sn-glycero-3-phospho-(1'-sn-glycerol)), a step needed in the bis(monoacylglycerol)phosphate biosynthetic pathway (PubMed:22683713). May have acyltransferase activity although the mechanism for PG remodeling has not been determined (PubMed:22683713).

Cellular Location
Mitochondrion membrane {ECO:0000250|UniProtKB:Q3U213}; Single-pass membrane protein. Endoplasmic reticulum Mitochondrion. Note=Localizes at the endoplasmic reticulum and at the endoplasmic reticulum-mitochondria interface.

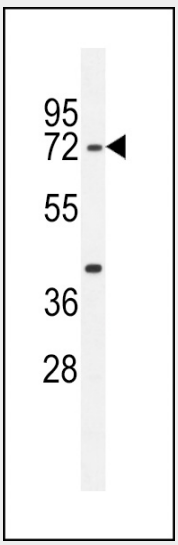
Tissue Location
Widely expressed, with predominant expression in skeletal muscle and brain (PubMed:22683713, PubMed:35235340). In the brain, highest levels are found in the frontal and occipital cortices, cerebellum and hippocampus (PubMed:22683713)

SRAC1 Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SRAC1 Antibody (C-term) - Images



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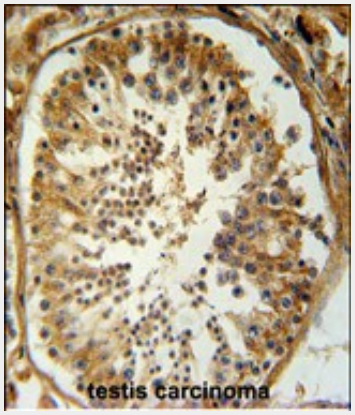
SRAC1 Antibody (C-term) (Cat. #AP10801b) western blot analysis in mouse stomach tissue lysates (35ug/lane).This demonstrates the SRAC1 antibody detected the SRAC1 protein (arrow).



SRAC1 Antibody (C-term) (Cat. #AP10801b) immunohistochemistry analysis in formalin fixed and paraffin embedded human testis carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the SRAC1 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

SRAC1 Antibody (C-term) - References

Rose, J. Phd, et al. Mol. Med. (2010) In press :
Mungall, A.J., et al. Nature 425(6960):805-811(2003)