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

Product Information

Application	WB, IHC-P, E
Primary Accession	Q96JX3
Other Accession	Q3U213, Q2TBM9, NP_116250.2
Reactivity	Human, Mouse
Predicted	Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB28676
Calculated MW	74147
Antigen Region	552-581

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	WB~~1:1000 IHC-P~~1:100~500 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.

Protein Information

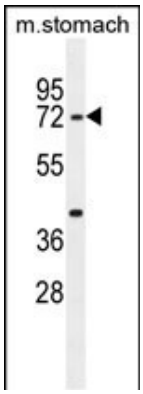
Name	SERAC1
Function	Facilitates the transport of serine from the cytosol to the mitochondria by interacting with and stabilizing Sideroflexin-1 (SFXN1), a mitochondrial serine transporter, playing a fundamental role in the one-carbon cycle responsible

	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)

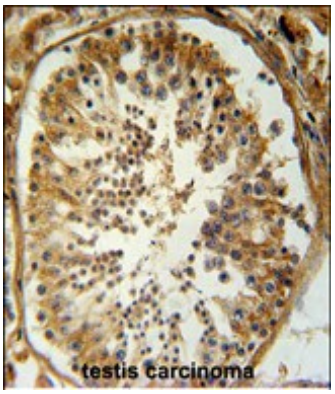
References

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

Images



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.