

SESTD1 Antibody

Catalog # ASC11182

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q86VW0
Other Accession	NP_835224 , 188528641
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	79348
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	SESTD1 antibody can be used for detection of SESTD1 by Western blot at 1 μ g/mL. Antibody can also be used for immunohistochemistry starting at 5 μ g/mL. For immunofluorescence start at 20 μ g/mL.

Additional Information

Gene ID	91404
Other Names	SEC14 domain and spectrin repeat-containing protein 1, Huntingtin-interacting protein-like protein, Protein Solo, SESTD1, SOLO
Target/Specificity	SESTD1;
Reconstitution & Storage	SESTD1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	SESTD1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SESTD1
Synonyms	SOLO
Function	May act as the primary docking protein directing membrane turnover and assembly of the transient receptor potential channels TRPC4 and TRPC5. Binds phospholipids such as phosphatidylinositol monophosphates, phosphatidylinositol diphosphates (PIP2s) and phosphatidic acid, but not less polar lipids including phosphatidylcholine, phosphatidylserine, and phosphatidylinositol. The binding to PIP2s is calcium dependent. Might be involved in the plasma membrane localization of CTNNB1.

Tissue Location

Broad expression. High expression in thalamus and brain. Significantly expressed in vasculature

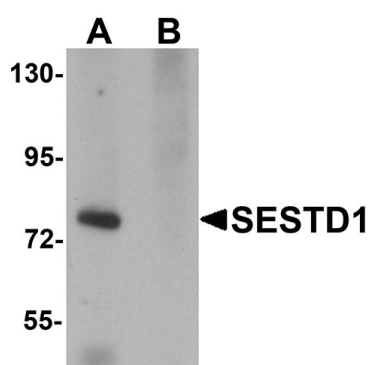
Background

SESTD1 Antibody: SESTD1 was initially identified in mutant zebrafish with defects in the spontaneous contraction and touch response as a novel gene, solo, encoding a protein containing SEC14 and spectrin repeat domains. Other experiments indicated that SESTD1 interacts with the TRPC4 and TRPC5, members of the transient receptor potential channel family, via the TRPC calmodulin- and inositol 1, 4, 5-triphosphate receptor-binding domain and is essential for efficient receptor-mediated activation of TRPC5, suggesting that SESTD1 is a novel regulator of these TRPC proteins.

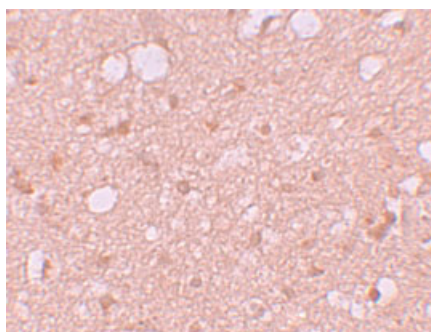
References

Sato T and Mishina M. Representational difference analysis, high-resolution physical mapping, and transcript identification of the zebrafish genomic region for a motor behavior. *Genomics* 2003; 82:218-29.
Miehe S, Bieberstein A, Arnold I, et al. The phospholipid-binding protein SESTD1 is a novel regulator of the transient receptor potential channels TRPC4 and TRPC5. *J. Biol. Chem.* 2010; 285:12426-34.

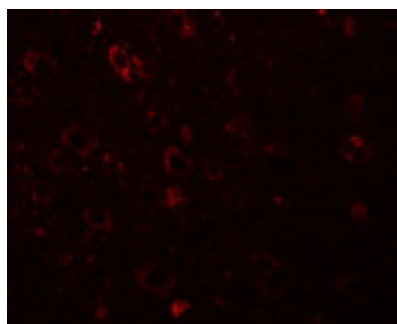
Images



Western blot analysis of SESTD1 in rat brain tissue lysate with SESTD1 antibody at 1 $\mu\text{g/mL}$ in (A) the absence and (B) the presence of blocking peptide.



Immunohistochemistry of SESTD1 in human brain tissue with SESTD1 antibody at 5 $\mu\text{g/mL}$.



Immunofluorescence of SESTD1 in Human Brain cells with SESTD1 antibody at 20 $\mu\text{g/mL}$.

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