

SESTD1 Antibody

Catalog # ASC11182

Specification

SESTD1 Antibody - Product Information

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype

Application Notes

WB, IHC, IF <u>Q86VW0</u>

NP_835224, 188528641 Human, Mouse, Rat

Rabbit Polyclonal

IgG

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.

SESTD1 Antibody - Additional Information

Gene ID 91404

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.

SESTD1 Antibody - 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

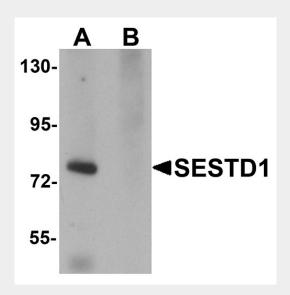


SESTD1 Antibody - Protocols

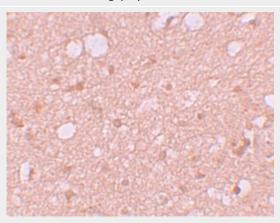
Provided below are standard protocols that you may find useful for product applications.

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

SESTD1 Antibody - Images

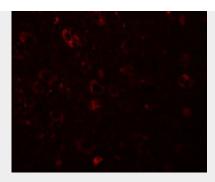


Western blot analysis of SESTD1 in rat brain tissue lysate with SESTD1 antibody at 1 μ g/mL in (A) the absence and (B) the presence of blocking peptide.



Immunohistochemistry of SESTD1 in human brain tissue with SESTD1 antibody at 5 μg/mL.





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

SESTD1 Antibody - 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.

SESTD1 Antibody - 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. Genomics2003; 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.