

SHISA4 Antibody

Catalog # ASC11633

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q96DD7
Other Accession	NP_937792 , 269973884
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	21522
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	SHISA4 Antibody can be used for detection of SHISA4 by Western blot starting at 1 µg/mL.

Additional Information

Gene ID	149345
Other Names	Protein shisa-4, Transmembrane protein 58, SHISA4, C1orf40, TMEM58
Target/Specificity	SHISA4; SHISA4 antibody is predicted to not cross-react with other SHISA protein family members.
Reconstitution & Storage	SHISA4 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.
Precautions	SHISA4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SHISA4
Synonyms	C1orf40, TMEM58
Cellular Location	Membrane; Single-pass type I membrane protein

Background

SHISA4 Antibody: SHISA4 plays an essential role in the maturation of presomitic mesoderm cells by individual attenuation of both FGF and WNT signaling. The Shisa family of single-transmembrane proteins is characterized by an N-terminal cysteine-rich domain and a proline-rich C-terminal region. Its founding member, *Xenopus Shisa*, promotes head development by antagonizing Wnt and FGF signaling. Shisa

physically interacted with immature forms of the Wnt receptor Frizzled and the FGF receptor within the ER and inhibited their posttranslational maturation and trafficking to the cell surface. Loss of Shisa function sensitized the neuroectoderm to Wnt signaling and suppressed head formation during gastrulation.

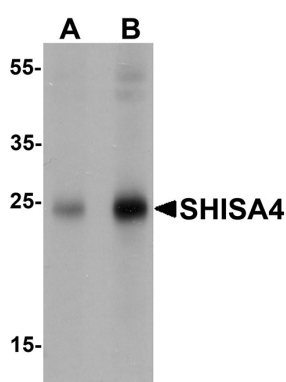
References

Furushima K, Yamamoto A, Nagano T, et al. Mouse homologues of Shisa antagonistic to Wnt and Fgf signalings. *Dev. Biol.* 2007; 306:480-92.

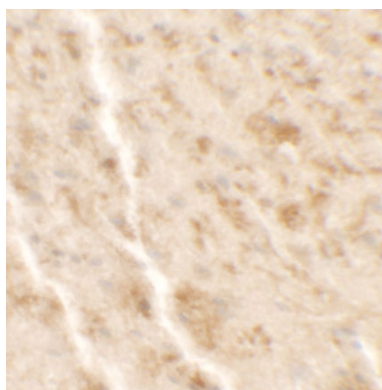
Pei J and Grishin NV. Unexpected diversity in Shisa-like proteins suggests the importance of their roles as transmembrane adaptors. *Cell Signal.* 2012; 24:758-69.

Yamamoto A, Nagano T, Takehara S, et al. Shisa promotes head formation through the inhibition of receptor protein maturation for the caudalizing factors, Wnt and FGF. *Cell* 2005; 120:223-35.

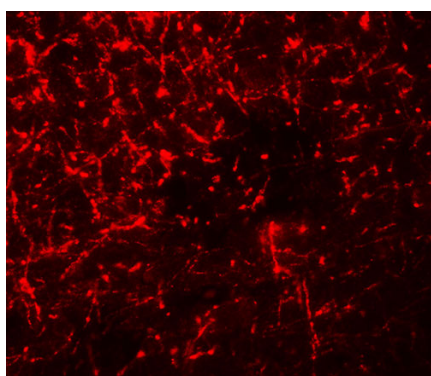
Images



Western blot analysis of SHISA4 in human brain tissue lysate with SHISA4 antibody at (A) 1 and (B) 2 µg/mL.



Immunohistochemistry of SHISA4 in mouse brain tissue with SHISA4 antibody at 2.5 µg/ml.



Immunofluorescence of SHISA4 in mouse brain tissue with SHISA4 antibody at 20 µg/ml.