

SHISA3 Antibody

Catalog # ASC11632

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	A0PIX4
Other Accession	NP_001073974 , 122937450
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	25832
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	SHISA3 Antibody can be used for detection of SHISA3 by Western blot at 1 μ g/mL.

Additional Information

Gene ID	152573
Other Names	Protein shisa-3 homolog, SHISA3
Target/Specificity	SHISA3; SHISA3 antibody is predicted to not cross-react with other SHISA protein family members.
Reconstitution & Storage	SHISA3 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.
Precautions	SHISA3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SHISA3
Function	Plays an essential role in the maturation of presomitic mesoderm cells by individual attenuation of both FGF and WNT signaling.
Cellular Location	Endoplasmic reticulum membrane {ECO:0000250, ECO:0000250 UniProtKB:Q7T0Z7}; Single-pass type I membrane protein {ECO:0000250 UniProtKB:Q7T0Z7}

Background

SHISA3 Antibody: SHISA3 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.

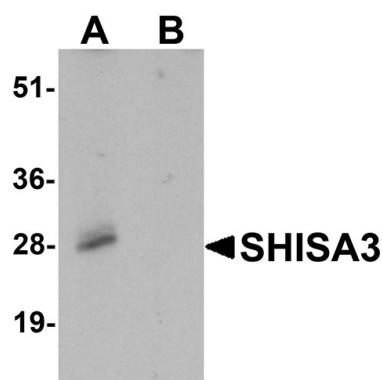
References

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

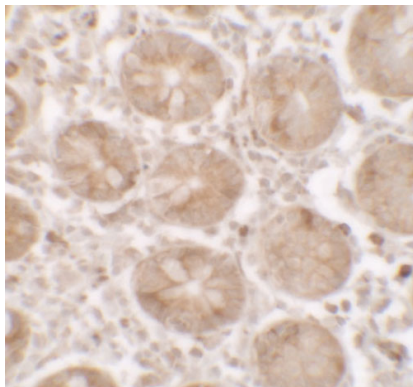
Pei J and Grishin NV. Unexpected diversity in Shisa-like proteins suggests the importance of their roles as transmembrane adaptors. *Cell Signal.* 2012; 24:758-69.

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

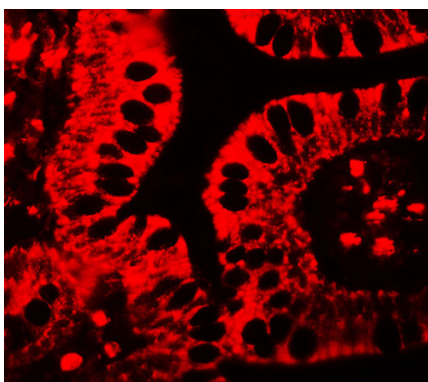
Images



Western blot analysis of SHISA3 in human small intestine Tissue lysate with SHISA3 antibody at 1 $\mu\text{g}/\text{mL}$ in (A) the absence and (B) the presence of blocking peptide.



Immunohistochemistry of SHISA3 in human small intestine tissue with SHISA3 antibody at 2.5 $\mu\text{g}/\text{ml}$.



Immunofluorescence of SHISA3 in human small intestine tissue with SHISA3 antibody at 20 $\mu\text{g}/\text{ml}$.

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