

VPS39 Antibody
Catalog # ASC11282**Specification****VPS39 Antibody - Product Information**

Application	WB
Primary Accession	O96JC1
Other Accession	AAQ05978 , 23339
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	VPS39 antibody can be used for detection of VPS39 by Western blot at 0.5 µg/mL. Antibody can also be used for immunohistochemistry starting at 5 µg/mL. For immunofluorescence start at 5 µg/mL.

VPS39 Antibody - Additional InformationGene ID **23339****Target/Specificity**

VPS39 antibody was raised against a 18 amino acid synthetic peptide near the carboxy terminus of human VPS39.

The immunogen is located within amino acids 710 - 760 of VPS39.

Reconstitution & Storage

VPS39 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

VPS39 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

VPS39 Antibody - Protein InformationName VPS39 ([HGNC:20593](#))

Synonyms KIAA0770, TLP, VAM6

Function

Regulator of TGF-beta/activin signaling, inhibiting SMAD3- and activating SMAD2-dependent transcription. Acts by interfering with SMAD3/SMAD4 complex formation, this would lead to inhibition of SMAD3-dependent transcription and relieve SMAD3 inhibition of SMAD2-dependent promoters, thus increasing SMAD2- dependent transcription. Does not affect TGF-beta-induced SMAD2 or SMAD3 phosphorylation, nor SMAD2/SMAD4 complex formation.

Cellular Location

Cytoplasm. Lysosome membrane; Peripheral membrane protein. Late endosome membrane;

Peripheral membrane protein. Note=Colocalizes with TGFBR1 and TGFBR2 in cytoplasmic vesicular structures and most prominently in cortical vesicles.

Tissue Location

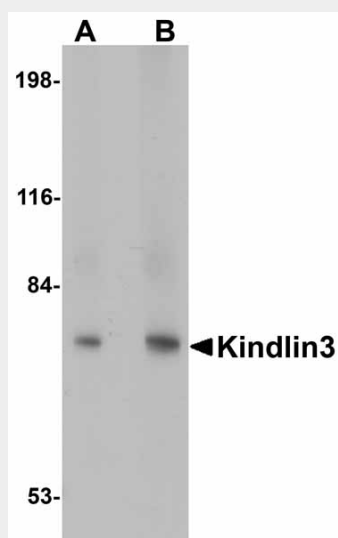
Widely expressed, with highest levels in heart, skeletal muscle, kidney, pancreas, brain, placenta and spleen

VPS39 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

VPS39 Antibody - Images



Western blot analysis of KINDLIN3 in rat spleen lysate with KINDLIN3 antibody at (A) 1 and (B) 2 μ g/mL.

VPS39 Antibody - Background

VPS39 Antibody: VPS39 is the mammalian homolog of the yeast vacuolar protein VAM6, that in mammals, promotes lysosome clustering and fusion in vivo. VPS39 is also thought to modulate the TGF-beta response by coupling the TGF-beta receptor complex to the Smad pathway. Similar to the related protein TRAP1, the VPS39 protein is essential for early embryonic development, with mice lacking VPS39 dying at or before E6.5.

VPS39 Antibody - References

Nakamura N, Hirata A, Ohsumi Y, et al. Vam2/Vps41p and Vam6/Vps39p are components of a protein complex on the vacuolar membranes and involved in the vacuolar assembly in the yeast

Saccharomyces cerevisiae. J. Biol. Chem. 1997; 272:11344-9.

Caplan S, Hartnell LM, Aguilar RC, et al. Human Vam6p promotes lysosome clustering and fusion in vivo. J. Cell Biol. 2001; 154:109-22.

Felici A, Wurthner JU, Parks WT, et al. TLP, a novel modulator of TGF-beta signaling, has opposite effects on Smad2- and Smad3-dependent signaling. EMBO J. 2003; 22:4465-77.

Messler S, Kropp S, Episkopou V, et al. The TGF-b signaling modulators TRAP1/TGFBRAP1 and VPS39/Vam6/TLP are essential for early embryonic development. Immunobiology 2011; 216:343-50.