

STOX1 Antibody

Catalog # ASC11496

Product Information

Application	WB, E
Primary Accession	Q6ZVD7
Other Accession	NP_689922 , 63025200
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	110962
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	STOX1 antibody can be used for detection of STOX1 by Western blot at 1 µg/mL.

Additional Information

Gene ID	219736
Other Names	Storkhead-box protein 1, Winged-helix domain-containing protein, STOX1, C10orf24
Target/Specificity	STOX1; STOX1 antibody is human reactive. At least three alternatively spliced transcript variants encoding distinct isoforms have been observed. STOX1 antibody recognize the two longest isoforms.
Reconstitution & Storage	STOX1 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	STOX1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	STOX1
Synonyms	C10orf24
Function	Involved in regulating the levels of reactive oxidative species and reactive nitrogen species and in mitochondrial homeostasis in the placenta (PubMed: 24738702). Required for regulation of inner ear epithelial cell proliferation via the AKT signaling pathway (By similarity).
Cellular Location	[Isoform A]: Cytoplasm. Nucleus Cytoplasm, cytoskeleton, microtubule

organizing center, centrosome. Note=In epithelial cells, diffusely expressed in the cytoplasm, particularly in peri-membrane cortical regions (By similarity). Concentrated at centrosomes during metaphase (PubMed:22253775). {ECO:0000250|UniProtKB:B2RQL2, ECO:0000269|PubMed:22253775} [Isoform C]: Nucleus, nucleolus.

Tissue Location

Expressed in placenta, including the invasive extravillous trophoblast cells.

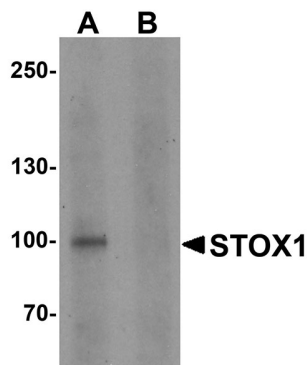
Background

STOX1 Antibody: STOX1 (Storkhead box 1), also known as PEE4 or C10orf24, is a winged-helix domain containing transcription factor believed to play a role in the differentiation of stem cells. As a DNA-binding protein, STOX1 exists as three alternatively spliced isoforms, designated A, B and C, all of which localize to either the cytoplasm or the nucleus. Defects in STOX1 are the cause of pre-eclampsia/eclampsia 4 (PEE4), also known as gestational proteinuric hypertension. STOX1 was also found to be functionally involved in late-onset Alzheimer's disease.

References

Van Dijk M, van Bezu J, Chim SS, et al. Maternal segregation of the Dutch preeclampsia locus at 10q22 with a new member of the winged helix gene family. *Nat. Genet.* 2005; 37:514-9.
Kivinen K, Peterson H, Hiltunen L, et al. Evaluation of STOX1 as a preeclampsia candidate gene in a population-wide sample. *Eur. J. Hum. Genet.* 2007;15:494-7.
Van Dijk M, van Bezu J, van Abel D, et al. The STOX1 genotype associated with pre-eclampsia leads to a reduction of trophoblast invasion by alpha-T-catenin upregulation. *Hum Mol. Genet.* 2010; 19:2658-67.
Van Abel D, H ¨zel DR, Jain S, et al. SFRS7-mediated splicing of tau exon 10 is directly regulated by STOX1A in glial cells. *PLoS One* 2011; 6 :e21994.

Images



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