

## **STOX1 Antibody**

Catalog # ASC11496

## **Specification**

# **STOX1 Antibody - Product Information**

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype

**Application Notes** 

WB

O6ZVD7

NP 689922, 63025200

Human Rabbit Polyclonal

IqG

STOX1 antibody can be used for detection of STOX1 by Western blot at 1  $\mu$ g/mL.

# **STOX1** Antibody - Additional Information

Gene ID 219736

#### 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.

# **STOX1 Antibody - 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:<a

href="http://www.uniprot.org/citations/24738702" target="\_blank">24738702</a>). 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**

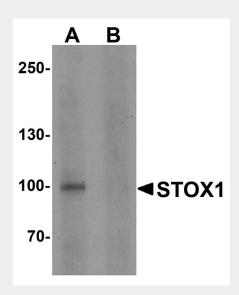
Expressed in placenta, including the invasive extravillus trophoblast cells.

#### **STOX1 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 Cytomety
- Cell Culture

# STOX1 Antibody - Images



Western blot analysis of STOX1 in human liver tissue lysate with STOX1 antibody at 1  $\mu$ g/ml in (A) the absence and (B) the presence of blocking peptide.

# STOX1 Antibody - 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.

## **STOX1 Antibody - 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, Hölzel 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.