

# SOX2 Blocking Peptide (C-term)

Synthetic peptide Catalog # BP21034a

# **Specification**

# SOX2 Blocking Peptide (C-term) - Product Information

Primary Accession P48431

Other Accession P48430, P54231

# SOX2 Blocking Peptide (C-term) - Additional Information

**Gene ID** 6657

#### **Other Names**

Transcription factor SOX-2, SOX2

# **Target/Specificity**

The synthetic peptide sequence is selected from aa 282-296 of HUMAN SOX2

#### Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

#### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

### SOX2 Blocking Peptide (C-term) - Protein Information

### Name SOX2

### **Function**

Transcription factor that forms a trimeric complex with OCT4 on DNA and controls the expression of a number of genes involved in embryonic development such as YES1, FGF4, UTF1 and ZFP206 (By similarity). Binds to the proximal enhancer region of NANOG (By similarity). Critical for early embryogenesis and for embryonic stem cell pluripotency (PubMed:<a href="http://www.uniprot.org/citations/18035408" target="\_blank">18035408</a>). Downstream SRRT target that mediates the promotion of neural stem cell self-renewal (By similarity). Keeps neural cells undifferentiated by counteracting the activity of proneural proteins and suppresses neuronal differentiation (By similarity). May function as a switch in neuronal development (By similarity).

# **Cellular Location**

Nucleus speckle {ECO:0000250|UniProtKB:Q05066}. Cytoplasm {ECO:0000250|UniProtKB:Q05738}. Nucleus {ECO:0000250|UniProtKB:Q05738}. Note=Acetylation contributes to its nuclear localization and deacetylation by HDAC3 induces a



cytoplasmic delocalization (By similarity). Colocalizes in the nucleus with ZNF208 isoform KRAB-O and tyrosine hydroxylase (TH) (By similarity) Colocalizes with SOX6 in speckles. Colocalizes with CAML in the nucleus (By similarity). Nuclear import is facilitated by XPO4, a protein that usually acts as a nuclear export signal receptor (By similarity) {ECO:0000250|UniProtKB:Q05066, ECO:0000250|UniProtKB:Q05738}

# SOX2 Blocking Peptide (C-term) - Protocols

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

### Blocking Peptides

SOX2 Blocking Peptide (C-term) - Images

# SOX2 Blocking Peptide (C-term) - Background

Transcription factor that forms a trimeric complex with OCT4 on DNA and controls the expression of a number of genes involved in embryonic development such as YES1, FGF4, UTF1 and ZFP206 (By similarity). Critical for early embryogenesis and for embryonic stem cell pluripotency. May function as a switch in neuronal development. Downstream SRRT target that mediates the promotion of neural stem cell self-renewal (By similarity). Keeps neural cells undifferentiated by counteracting the activity of proneural proteins and suppresses neuronal differentiation (By similarity).

# SOX2 Blocking Peptide (C-term) - References

Stevanovic M.,et al.Mamm. Genome 5:640-642(1994).
Sadler L.A.,et al.Submitted (DEC-1992) to the EMBL/GenBank/DDBJ databases.
Fantes J.,et al.Nat. Genet. 33:461-463(2003).
Takahashi K.,et al.Cell 131:861-872(2007).
Rigbolt K.T.,et al.Sci. Signal. 4:RS3-RS3(2011).