

(Mouse) Sox2 Blocking Peptide (N-term)

Synthetic peptide Catalog # BP21154a

Specification

(Mouse) Sox2 Blocking Peptide (N-term) - Product Information

Primary Accession

P48432

(Mouse) Sox2 Blocking Peptide (N-term) - Additional Information

Gene ID 20674

Other Names

Transcription factor SOX-2, Sox2, Sox-2

Target/Specificity

The synthetic peptide sequence is selected from aa 34-48 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.

(Mouse) Sox2 Blocking Peptide (N-term) - Protein Information

Name Sox2

Synonyms Sox-2

Function

Transcription factor that forms a trimeric complex with POU5F1 (OCT3/4) on DNA and controls the expression of a number of genes involved in embryonic development such as YES1, FGF4, UTF1 and ZFP206 (PubMed:15863505, PubMed:17097055, PubMed:19740739, PubMed:32703285). Binds to the proximal enhancer region of NANOG (PubMed:15863505). Critical for early embryogenesis and for embryonic stem cell pluripotency (By similarity). Downstream SRRT target that mediates the promotion of neural stem cell self-renewal (PubMed:22198669). 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 {ECO:0000255|PROSITE-ProRule:PRU00267, ECO:0000269|PubMed:17097055, ECO:0000269|PubMed:19349578, ECO:0000269|PubMed:32127020}. Cytoplasm Note=Nuclear import is facilitated by XPO4, a protein that usually acts as a nuclear export signal receptor.

Tissue Location

Expressed in the cochlea (at protein level) (PubMed:32127020). Expressed in the brain and retina (PubMed:15863505, PubMed:7590241). A very low level of expression is seen in the stomach and lung (PubMed:15863505, PubMed:7590241). Expressed in the kidney (PubMed:15863505).

(Mouse) Sox2 Blocking Peptide (N-term) - Protocols

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

• Blocking Peptides

(Mouse) Sox2 Blocking Peptide (N-term) - Images

(Mouse) Sox2 Blocking Peptide (N-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. 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. Keeps neural cells undifferentiated by counteracting the activity of proneural proteins and suppresses neuronal differentiation (By similarity).

(Mouse) Sox2 Blocking Peptide (N-term) - References

Yuan H.,et al.Genes Dev. 9:2635-2645(1995). Yuan H.,et al.Submitted (AUG-1998) to the EMBL/GenBank/DDBJ databases. Collignon J.,et al.Development 122:509-520(1996). Tsuruzoe S.,et al.Biochem. Biophys. Res. Commun. 351:920-926(2006). Takahashi K.,et al.Cell 126:663-676(2006).