

phospho-Sox2(S246) Antibody Blocking peptide
Synthetic peptide
Catalog # BP3750a**Specification**

phospho-Sox2(S246) Antibody Blocking peptide - Product InformationPrimary Accession [P48431](#)**phospho-Sox2(S246) Antibody Blocking peptide - Additional Information****Gene ID** 6657**Other Names**

Transcription factor SOX-2, 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.

phospho-Sox2(S246) Antibody Blocking peptide - 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:18035408). 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}

phospho-Sox2(S246) Antibody Blocking peptide - Protocols

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

- [Blocking Peptides](#)

phospho-Sox2(S246) Antibody Blocking peptide - Images

phospho-Sox2(S246) Antibody Blocking peptide - Background

This intronless gene encodes a member of the SRY-relatedHMG-box (SOX) family of transcription factors involved in theregulation of embryonic development and in the determination ofcell fate. The product of this gene is required for stem-cellmaintenance in the central nervous system, and also regulates geneexpression in the stomach. Mutations in this gene have beenassociated with optic nerve hypoplasia and with syndromicmicrophthalmia, a severe form of structural eye malformation. Thisgene lies within an intron of another gene called SOX2 overlappingtranscript (SOX2OT).

phospho-Sox2(S246) Antibody Blocking peptide - References

Gen, Y., et al. Cancer Genet. Cytogenet. 202(2):82-93(2010)Ji, J., et al. Hum. Pathol. 41(10):1438-1447(2010)Fang, X., et al. OMICS 14(4):369-384(2010)Sholl, L.M., et al. Am. J. Surg. Pathol. 34(8):1193-1198(2010)Zhang, D., et al. BMC Med. Genet. 11, 116 (2010) :