

SOX2 Antibody (aa100-150) Rabbit Polyclonal Antibody Catalog # ALS15554

Specification

SOX2 Antibody (aa100-150) - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW Dilution WB, IHC-P <u>P48431</u> Human, Mouse, Monkey, Pig, Chicken, Cat Rabbit Polyclonal 34kDa KDa WB~~1:1000 IHC-P~~N/A

SOX2 Antibody (aa100-150) - Additional Information

Gene ID 6657

Other Names Transcription factor SOX-2, SOX2

Target/Specificity Human SOX2

Reconstitution & Storage Store at 4°C for short term applications. For long term storage, aliquot and store at -20°C.

Precautions SOX2 Antibody (aa100-150) is for research use only and not for use in diagnostic or therapeutic procedures.

SOX2 Antibody (aa100-150) - 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}

SOX2 Antibody (aa100-150) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SOX2 Antibody (aa100-150) - Images



Western blot of SOX2 in mouse embryo brain lysate in the 1) absence and 2) presence of...

SOX2 Antibody (aa100-150) - 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 Antibody (aa100-150) - 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).