

ARG10671 anti-SOX2 antibody

Package: 50 μl Store at: -20°C

Summary

Product Description	Rat Monoclonal antibody recognizes SOX2
Tested Reactivity	Hu, Ms
Tested Application	FACS, ICC/IF
Host	Rat
Clonality	Monoclonal
Isotype	IgG2a, kappa
Target Name	SOX2
Species	Human
Immunogen	Human SOX2 recombinant protein.
Conjugation	Un-conjugated
Alternate Names	Transcription factor SOX-2; MCOPS3; ANOP3

Application Instructions

Application table	Application	Dilution
	FACS	1:100
	ICC/IF	1:100
Application Note	* The dilutions indicate recomm should be determined by the sci	nended starting dilutions and the optimal dilutions or concentrations ientist.

Properties

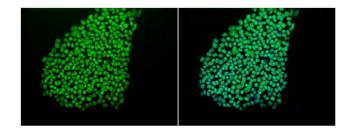
Form	Liquid
Buffer	PBS (pH 7.2) and 0.09% Sodium azide.
Preservative	0.09% Sodium azide
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links

	<u>GeneID: 6657 Human</u>
	Swiss-port # P48431 Human
	Swiss-port # P48432 Mouse
Gene Symbol	SOX2
Gene Full Name	SRY (sex determining region Y)-box 2
Background	This intronless gene encodes a member of the SRY-related HMG-box (SOX) family of transcription factors involved in the regulation of embryonic development and in the determination of cell fate. The product of this gene is required for stem-cell maintenance in the central nervous system, and also regulates gene expression in the stomach. Mutations in this gene have been associated with optic nerve hypoplasia and with syndromic microphthalmia, a severe form of structural eye malformation. This gene lies within an intron of another gene called SOX2 overlapping transcript (SOX2OT). [provided by RefSeq, Jul 2008]
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). 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). [UniProt]
Calculated Mw	34 kDa
PTM	Sumoylation inhibits binding on DNA and negatively regulates the FGF4 transactivation.

Images



ARG10671 anti-SOX2 antibody ICC/IF image

Immunocytochemistry: H1 human ES cells stained with ARG10671 anti-SOX2 antibody (green) at 1:100 dilution. Nuclei were counterstained with DAPI (blue).