

ARG55243 anti-SOX2 antibody [57CT23.3.4]

Package: 100 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody recognizes SOX2
Tested Reactivity	Hu
Tested Application	FACS, ICC/IF, IHC-P, WB
Host	Mouse
Clonality	Monoclonal
Clone	57CT23.3.4
Isotype	IgG1
Target Name	SOX2
Species	Human
Immunogen	Recombinant protein of Human SOX2 (Swiss: P48431).
Conjugation	Un-conjugated
Alternate Names	Transcription factor SOX-2; MCOPS3; ANOP3

Application Instructions

Application table	Application	Dilution
	FACS	1:10 - 1:50
	ICC/IF	1:100
	IHC-P	Assay-dependent
	WB	1:200 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	NCCIT	

Properties

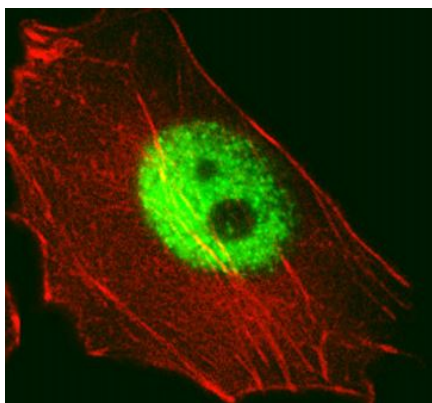
Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS and 0.09% (W/V) Sodium azide
Preservative	0.09% (W/V) Sodium azide
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost 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

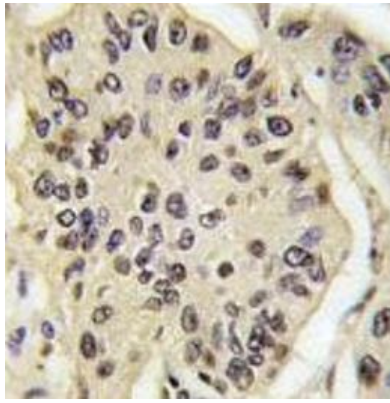
Database links	GeneID: 6657 Human Swiss-port # P48431 Human
Gene Symbol	SOX2
Gene Full Name	SRY (sex determining region Y)-box 2
Background	This intronless gene encodes a member of the SRY-related HMG-box (SOX) family of transcription factors involved in the regulation of embryonic development and in 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]
Research Area	Developmental Biology antibody; Gene Regulation antibody; Neuroscience antibody
Calculated Mw	34 kDa
PTM	Sumoylation inhibits binding on DNA and negatively regulates the FGF4 transactivation.
Cellular Localization	Nucleus.

Images



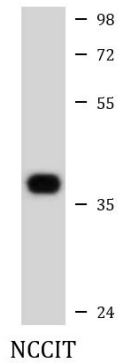
ARG55243 anti-SOX2 antibody ICC/IF image

Immunofluorescence: A549 cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then stained with ARG55243 anti-SOX2 antibody (green) at 1:25 dilution, 1 hour at 37°C. Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7 units/ml, 1 hour at 37°C).



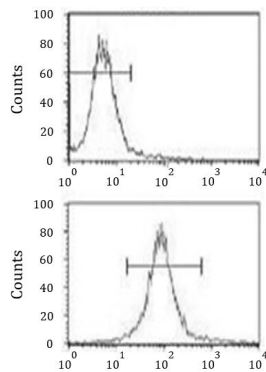
ARG55243 anti-SOX2 antibody IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded Human lung carcinoma tissue stained with ARG55243 anti-SOX2 antibody.



ARG55243 anti-SOX2 antibody WB image

Western blot: 20 µg of NCCIT cell lysate stained with ARG55243 anti-SOX2 antibody at 1:1000 dilution.



ARG55243 anti-SOX2 antibody FACS image

Flow Cytometry: NCI-H460 cells stained with ARG55243 anti-SOX2 antibody (bottom histogram) or without primary antibody control (top histogram), followed by incubation with PE labelled secondary antibody.