

Product datasheet for **TA306914**

SOX2 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, WB
Recommended Dilution:	WB: 1 - 2 ug/mL, ICC: 5 ug/mL, IF: 20 ug/mL
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	SOX2 antibody was raised against a 15 amino acid peptide near the amino terminus of human SOX.
Formulation:	PBS containing 0.02% sodium azide.
Concentration:	1ug/ul
Purification:	Affinity chromatography purified via peptide column
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	SRY-box 2
Database Link:	NP_003097 Entrez Gene 20674 Mouse Entrez Gene 499593 Rat Entrez Gene 6657 Human P48431



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Background:

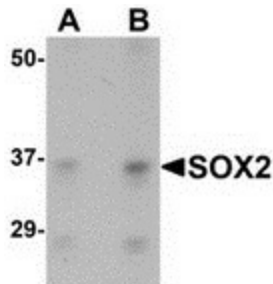
SOX2 is a member of the SRY-related HMG-box (SOX) family of transcription factors involved in the regulation of embryonic development and in the determination of cell fate. SOX2 is required for stem-cell maintenance in the central nervous system, and also regulates gene expression in the stomach. Mutations in this gene have been associated with optic nerve hypoplasia and with syndromic microphthalmia, a severe form of structural eye malformation. The role of SOX2 in embryonic development suggested that it might be useful in the creation of stem cells that might be useful in cell replacement therapies in the treatment of degenerative diseases. Artificial stem cells, termed induced pluripotent stem (iPS) cells, can be created by expressing SOX2 and the transcription factors POU5F1, Klf4 and Lin28 along with c-Myc in mouse fibroblasts. Other experiments have shown that iPS cells could be generated using expression plasmids expressing POU5F1, SOX2, Klf4 and c-Myc, eliminating the need for virus introduction.

Synonyms:

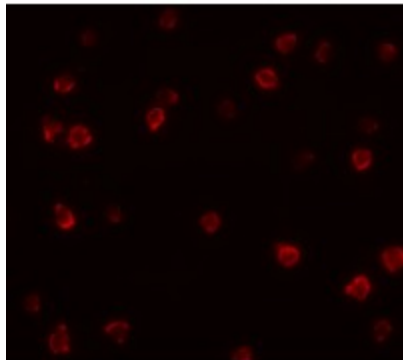
ANOP3; MCOPS3

Protein Families:

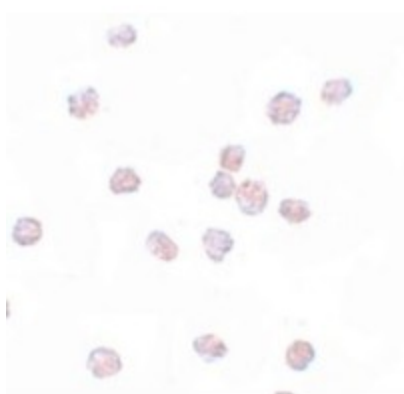
Adult stem cells, Cancer stem cells, Embryonic stem cells, ES Cell Differentiation/IPS, Induced pluripotent stem cells, Transcription Factors

Product images:

Western blot analysis of SOX2 in 3T3 cell lysate with SOX2 antibody at (A) 1 and (B) 2 ug/mL.



Immunofluorescence of SOX2 in 3T3 cells with SOX2 antibody at 20 ug/mL.



Immunocytochemistry of SOX2 in 3T3 cells with SOX2 antibody at 5 ug/mL.