

Datasheet for 600-401-ES5**SOX2 Antibody****Overview**

Description:	Anti-SOX2 (RABBIT) Antibody - 600-401-ES5
Item No.:	600-401-ES5
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

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:	SOX2 Antibody, ANOP3, MCOPS3, Transcription factor SOX-2
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	SOX2
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-SOX2 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 15 amino acid synthetic peptide near the N-terminus of human SOX.
Purity/Specificity:	Anti-SOX2 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with SOX2 from other sources has not been determined.
Relevant Links:	• UniProtKB - P48431 • GeneID - 6657 • NCBI - NP_003097.1

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-SOX2 Antibody has been tested for use in ELISA, Western Blotting, Immunocytochemistry, Immunohistochemistry, and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 34 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000 - 1:20,000
IF:	20 µg/mL
IHC:	5 µg/mL
WB:	1-2 µg/mL

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

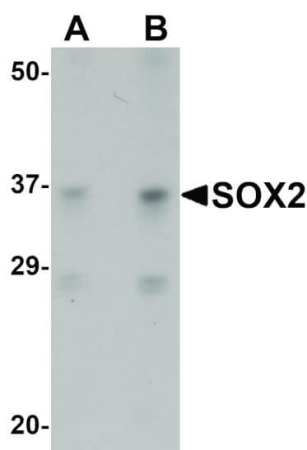
Shipping & Handling

Shipping Condition:	Wet Ice
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Storage Condition: Antibody can be stored at 4°C up to one year. Antibodies should not be exposed to prolonged high temperatures.

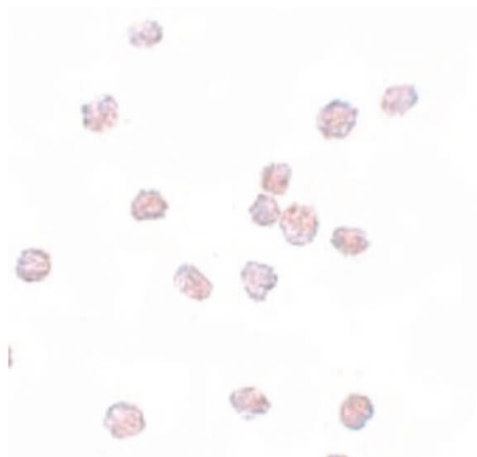
Expiration: Expiration date is one (1) year from date of receipt.

Images



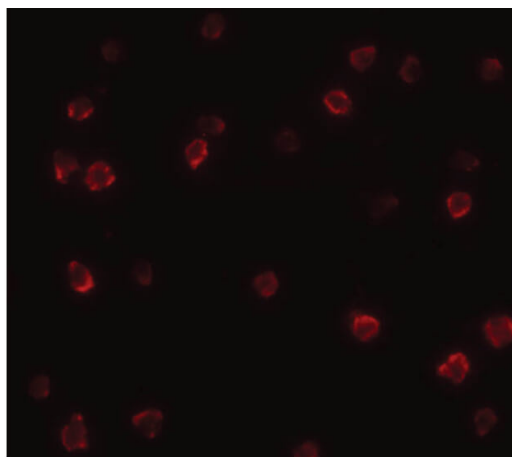
Western Blot

Western Blot of SOX2 antibody. Lane 1: 3T3 cell lysate with SOX2 antibody at 1 µg/mL. Lane 2: 3T3 cell lysate with SOX2 antibody at 2 µg/mL. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 34 kDa, 36 kDa for SOX2. Other band(s): SOX2 splice variants and isoforms.



Immunohistochemistry

Immunocytochemistry of SOX2 antibody. Tissue: 3T3 cells. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: SOX2 antibody at 5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: SOX2 is secreted into the extracellular space. Staining: SOX2 as precipitated pink signal with blue nuclear counterstain.

**Immunofluorescence Microscopy**

Immunofluorescence Microscopy of SOX2 antibody. Tissue: 3T3 cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: SOX2 antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: SOX2 is secreted into the extracellular space. Staining: SOX2 as red fluorescent signal.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.