# SOX2 antibody

Catalog No: #38134



Package Size: #38134-1 50ul #38134-2 100ul

Orders: order@signalwayantibody.com Support: tech@signalwayantibody.com

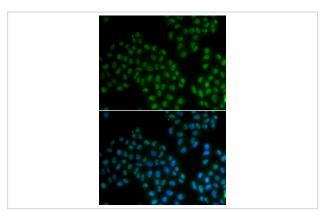
## Description

Product Name	SOX2 antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were purified by affinity purification using immunogen.
Applications	WB,IHC,IF
Species Reactivity	Human,Mouse,Rat
Specificity	The antibody detects endogenous level of total SOX2 protein.
Immunogen Type	Recombinant Protein
Immunogen Description	Recombinant protein of human SOX2.
Target Name	SOX2
Other Names	SOX2;ANOP3;MCOPS3;MGC2413;
Accession No.	Swiss-Prot#: P48431NCBI Gene ID: 6657
Uniprot	P48431
GeneID	6657;
SDS-PAGE MW	34kd
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02%
	sodium azide and 50% glycerol.
Storage	Store at -20°C

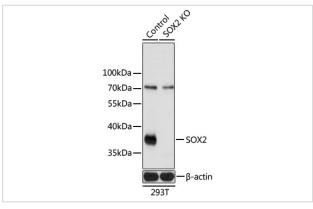
## Application Details

WB□1:500 - 1:2000IHC□1:50 - 1:200IF□1:50 - 1:200IP□1:50 - 1:200

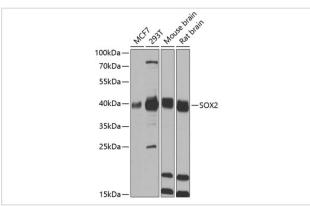
#### **Images**



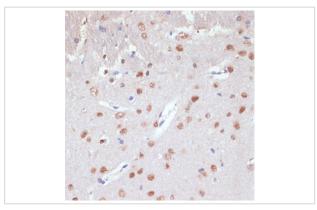
Immunofluorescence analysis of A549 cells using SOX2 .



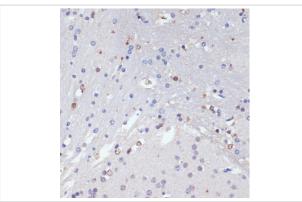
Western blot analysis of extracts from normal (control) and SOX2 knockout (KO) 293T cells, using SOX2 at 1:1000 dilution.



Western blot analysis of extracts of various cell lines, using SOX2 at 1:1000 dilution.



Immunohistochemistry of paraffin-embedded rat brain using SOX2 at dilution of 1:200 (40x lens).



Immunohistochemistry of paraffin-embedded mouse brain using SOX2 at dilution of 1:200 (40x lens).

#### Background

Embryonic stem cells are derived from the inner cell mass of the blastocyst and are unique in their pluripotent capacity and potential for self-renewal. Sox2 is one of a set of transcription factors that are crucial for the maintenance of pluripotency (1). Sox2, Oct-4, and Nanog cooperate in this network (1-3), and siRNA knockdown of either Sox2 or Oct-4 results in loss of pluripotency (4,5). Chromatin immunoprecipitation experiments have shown that Sox2 and Oct-4 bind to thousands of gene regulatory sites, highlighting the importance of these transcription factors in early embryonic development (6,7). It has recently been shown that Sox2 is amplified in lung and esophageal squamous cell tumors (8).

Note: This product is for in vitro research use only