SOX2 Rabbit PolymAb®

Catalog No.: A19118PM

Recombinant

www.abclonal.com

Basic Information

Observed MW
35 kDa

Calculated MW
34 kDa

Category
Monoclonal Antibodies

Applications
WB, IP, IF/ICC, IF-P, IHC-P, ChIP, CUT&Tag, ELISA

Cross Reactivity
Human, Mouse, Rat

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).

Recommended Dilutions

WB	1:3000 - 1:15000
IP	0.5 μg - 4 μg antibody for 500 μg - 700 μg extracts of whole cells
IF/ICC	1:200 - 1:400
IF-P	1:200 - 1:400
IHC-P	1:200 - 1:800
ChIP	3 μg antibody for 10 μg - 15 μg of Chromatin
CUT&Tag	10^5 cells /1 μg
ELISA	Recommended starting concentration is 1 μg/mL. Please optimize the concentration based on your specific assay requirements.

Immunogen Information

Gene ID
6657

Swiss-Prot
P48431

Immunogen
Synthetic peptide. This information is considered to be commercially sensitive.

Synonyms
ANOP3; MCOPS3

Contact

400-999-6126

cn.market@abclonal.com.cn

www.abclonal.com.cn

Product Information

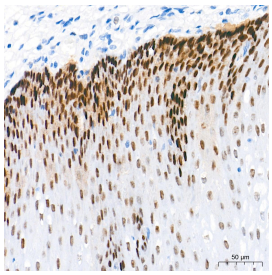
Source
Rabbit

Isotype
IgG

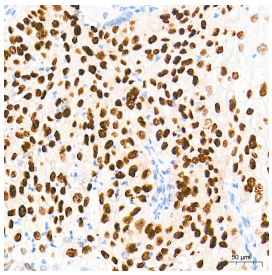
Purity
Affinity purification

Storage
Store at -20℃

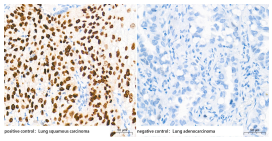
Validation Data



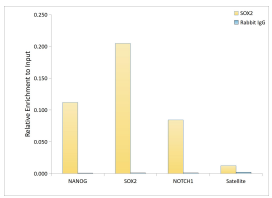
Immunohistochemistry analysis of paraffin-embedded Human esophagus tissue using SOX2 Rabbit PolymAb® (A19118PM) at a dilution of 1:600 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



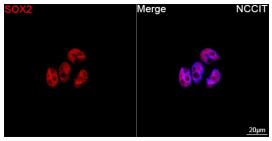
Immunohistochemistry analysis of paraffin-embedded Human lung squamous carcinoma tissue using SOX2 Rabbit PolymAb® (A19118PM) at a dilution of 1:600 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



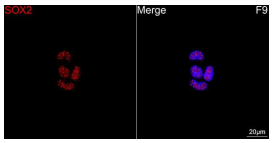
Immunohistochemistry analysis of paraffin-embedded Human lung squamous carcinoma(positive control) and Human lung adenocarcinoma(negative control) tissue using SOX2 Rabbit PolymAb® (A19118PM) at a dilution of 1:600 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



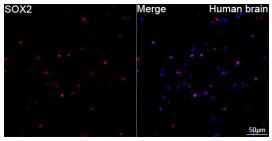
Chromatin immunoprecipitation was performed with 15 µg of cross-linked chromatin from NCCIT, using 3 µg of SOX2 Rabbit PolymAb® (A19118PM) and Rabbit IgG isotype control (AC042). The enrichment of immunoprecipitated DNA at different genomic loci was examined by quantitative PCR. The histogram compares the ratio of the immunoprecipitated DNA to the input at given loci.



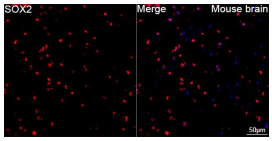
Confocal imaging of NCCIT cells using SOX2 Rabbit PolymAb® (A19118PM, dilution 1: 200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 100x.



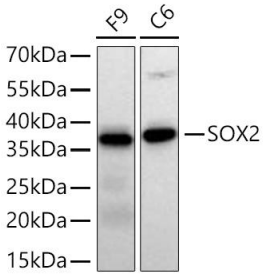
Confocal imaging of F9 cells using SOX2 Rabbit PolymAb® (A19118PM, dilution 1: 200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 100x.



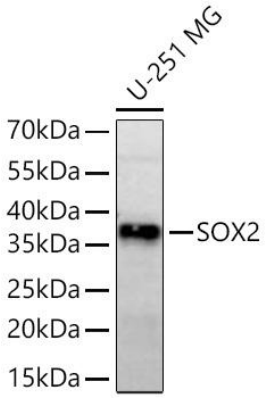
Confocal imaging of paraffin-embedded Human brain tissue using SOX2 Rabbit PolymAb® (A19118PM, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IF staining. Objective: 40x.



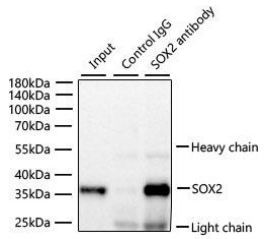
Confocal imaging of paraffin-embedded Mouse brain tissue using SOX2 Rabbit PolymAb® (A19118PM, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IF staining. Objective: 40x.



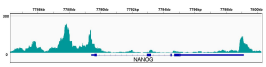
Western blot analysis of various lysates using SOX2 Rabbit PolymAb® (A19118PM) at 1:7000 dilution incubated overnight at 4℃.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1: 10000 dilution.
Lysates/proteins: 25 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 30s.



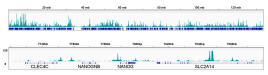
Western blot analysis of lysates from U-251 MG cells using SOX2 Rabbit PolymAb® (A19118PM) at 1:7000 dilution incubated overnight at 4℃.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1: 10000 dilution.
Lysates/proteins: 25 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 90s.



Immunoprecipitation of SOX2 from 600 µg extracts of NCCIT cells was performed using 0.5 µg of SOX2 Rabbit PolymAb® (A19118PM). Rabbit Control IgG (AC005) was used to precipitate the Control IgG sample. IP samples were eluted with 1x Laemmli Buffer. The Input lane represents 10% of the total input. Western blot analysis of immunoprecipitates was conducted using SOX2 Rabbit PolymAb® (A19118PM) at a dilution of 1:8000.



CUT&Tag was performed using the CUT&Tag Assay Kit（pAG-Tn5）V3 for Illumina (RK21513) from 10^5 NCCIT cells with 1 µg of SOX2 Rabbit PolymAb® (A19118PM), followed by incubation with Goat Anti-Rabbit IgG(H+L)(AS070). The results denote the enrichment pattern of SOX2 around NANOG gene.



CUT&Tag was performed using the CUT&Tag Assay Kit（pAG-Tn5）V3 for Illumina (RK21513) from 10^5 NCCIT cells with 1 µg of SOX2 Rabbit PolymAb® (A19118PM), followed by incubation with Goat Anti-Rabbit IgG(H+L)(AS070). The CUT&Tag results denote the enrichment pattern of SOX2 across chromosome 12 (upper panel) and the genomic region encompassing NANOG, a representative gene enriched in SOX2 (lower panel).