

10-6574: Mouse Monoclonal Antibody to SOX2 (Clone: 57CT23.3.4)(Discontinued)

Clonality :	Monoclonal
Clone Name :	57CT23.3.4
Application :	FACS,WB,IF
Reactivity :	Human
Gene :	SOX2
Gene ID :	6657
Uniprot ID :	P48431
Format :	Purified
Alternative Name :	Transcription factor SOX-2, SOX2
Isotype :	Mouse IgG1
Immunogen Information :	Recombinant Protein

Description

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).

Product Info

Amount :	80 μ l / 400 μ l
Purification :	Protein G Chromatography
Content :	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.
Storage condition :	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term store at -20°C in small aliquots to prevent freeze-thaw cycles.

Application Note

IF~1:10~50|| WB~1:200~4000|| IHC-P|| 1:50~100||FACS~1:10~50

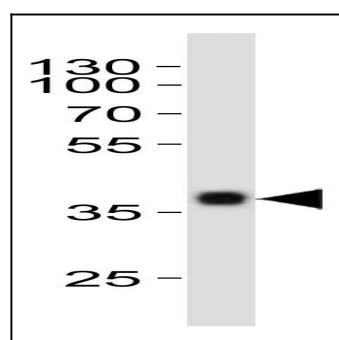


Figure 1: Western blot analysis of SOX2 Antibody (10-6574) with NCCIT cell line. SOX2 Antibody was diluted at 1:1000. A goat anti-mouse IgG H&L (HRP) at 1:3000 dilution was used as the secondary antibody. Lysate at 20 μ g.

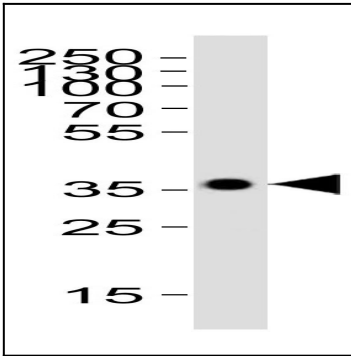


Figure 2: Western blot analysis of lysate from SOX2 protein, using SOX2 Antibody (10-6574). SOX2 Antibody was diluted at 1:4000. A goat anti-mouse IgG H&L (HRP) at 1:3000 dilution was used as the secondary antibody. Lysate at 20 μ g.

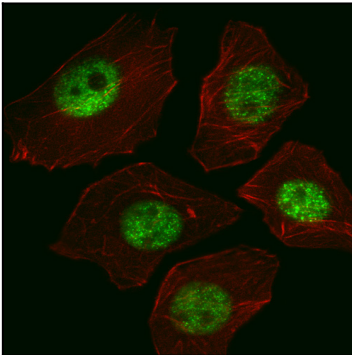


Figure 3: Fluorescent image of A549 cell stained with SOX2 Antibody (10-6574). A549 cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with SOX2 primary antibody (1:25, 1 h at 37 $^{\circ}$ C). For secondary antibody, Alexa Fluor $^{\circledR}$ 488 conjugated donkey anti-mouse antibody (green) was used (1:400, 50 min at 37 $^{\circ}$ C). Cytoplasmic actin was counterstained with Alexa Fluor $^{\circledR}$ 555 (red) conjugated Phalloidin (7units/ml, 1 h) at 37 $^{\circ}$ C. SOX2 immunoreactivity is localized to Nucleus significantly.

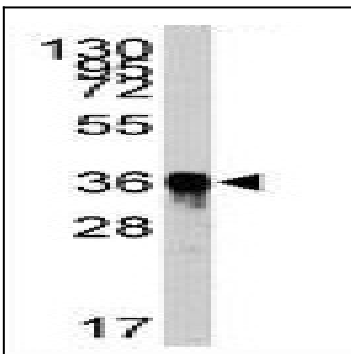


Figure 4: Western blot analysis of SOX2 Antibody (10-6574) by SOX2 recombinant protein. SOX2 was detected using the purified Mab.

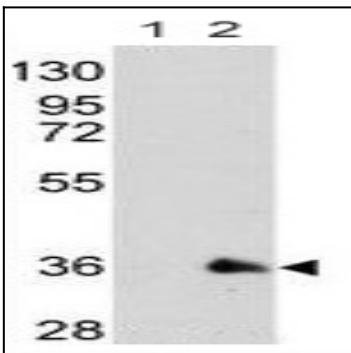


Figure 5: Western blot analysis of SOX2 using mouse monoclonal SOX2 antibody (10-6574) with Lane 1: 293 cell lysates (20 μ g/lane) either nontransfected or Lane 2: transiently transfected with the SOX2 gene.

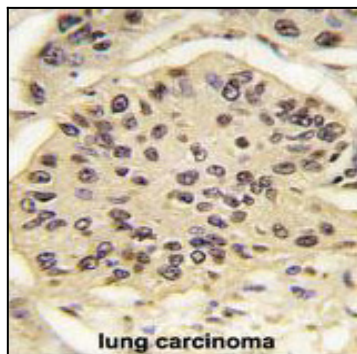


Figure 6 : Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with SOX2 Antibody (10-6574), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

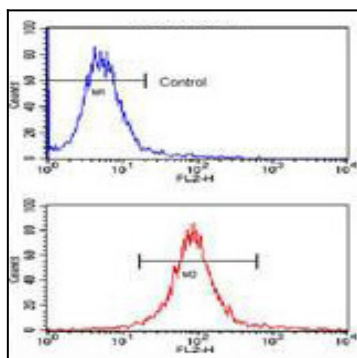


Figure 7: Flow cytometric analysis of NCI-H460 cells using SOX2 Monoclonal Antibody (10-6574) (bottom histogram) compared to a negative control cell (top histogram). PE-conjugated goat-anti-mouse secondary antibodies were used for the analysis.