

## Product datasheet for **TA302025**

### SOX2 Mouse Monoclonal Antibody

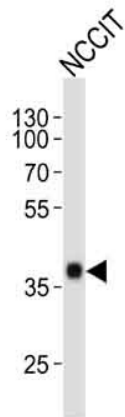
#### Product data:

Product Type:	Primary Antibodies
Applications:	FC, IF, IHC, WB
Recommended Dilution:	IF: 1:100, WB: 1:200~2000, IHC: 1:50~100, FC: 1:10~50
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1, kappa
Clonality:	Monoclonal
Immunogen:	SOX2 recombinant protein is used to produce this monoclonal antibody.
Formulation:	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.
Purification:	This antibody is purified through a protein G column, followed by dialysis against PBS.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	34310 Da
Gene Name:	SRY-box 2
Database Link:	<a href="#">NP_003097</a> <a href="#">Entrez Gene 6657 Human P48431</a>
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. This protein may act as a transcriptional activator after forming a protein complex with other proteins. Mutations in the SOX2 gene have been associated with bilateral anophthalmia, a severe form of structural eye malformation.
Synonyms:	ANOP3; MCOPS3
Protein Families:	Adult stem cells, Cancer stem cells, Embryonic stem cells, ES Cell Differentiation/IPS, Induced pluripotent stem cells, Transcription Factors

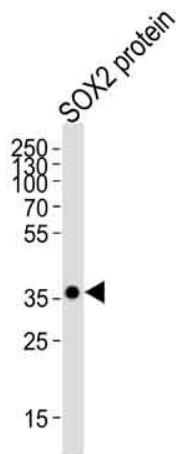


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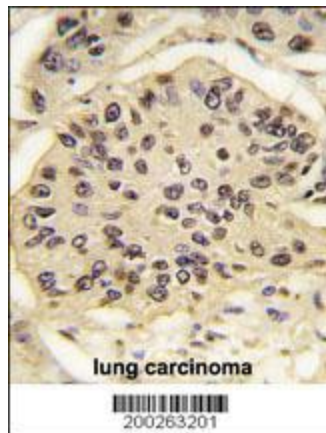
Product images:



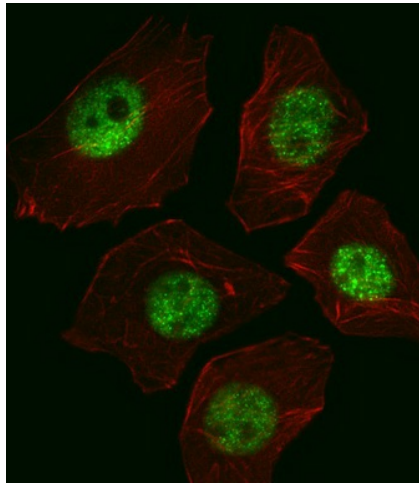
Western blot analysis of SOX2 Antibody (Cat.#TA302025) by SOX2 recombinant protein. SOX2 (arrow) was detected using the purified Mab.



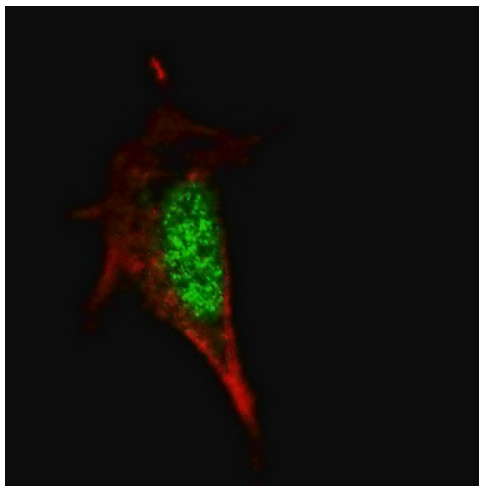
Western blot analysis of SOX2 (arrow) using mouse monoclonal SOX2 antibody (Cat.#TA302025). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the SOX2 gene (Lane 2) (Origene Technologies)



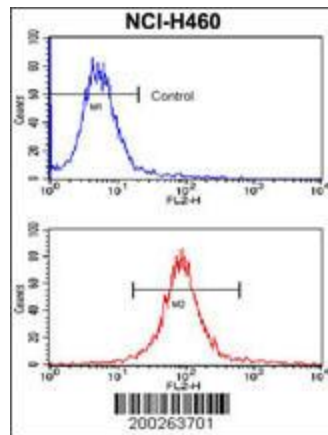
Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with SOX2 Antibody (Cat.#TA302025), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



IF image of A549 cell stained with SOX2 Antibody (Cat#TA302025/SG110310AA).A549 cells were incubated with SOX2 primary antibody (1:25, 1 h at 37°C). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-mouse antibody (green) was used (1:400).Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7 units/ml).SOX2 immunoreactivity is localized to Nucleus significantly.



Fluorescent confocal image of SY5Y cells stained with SOX2 antibody. SY5Y cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.2%, 30 min). Cells were then incubated with TA302025 SOX2 primary antibody (1:100, 2 h at room temperature). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-mouse antibody (green) was used (1:1000, 1h). Note the highly specific localization of the SOX2 mainly to the nucleus.



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