

## 10-8013: Monoclonal Antibody to SOX10 (Clone: ABM42D7)

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	ABM42D7
<b>Application :</b>	IHC, WB
<b>Reactivity :</b>	Human
<b>Gene :</b>	SOX10
<b>Gene ID :</b>	6663
<b>Uniprot ID :</b>	P56693
<b>Format :</b>	Purified
<b>Alternative Name :</b>	SOX10
<b>Isotype :</b>	Mouse IgG1 Kappa
<b>Immunogen Information :</b>	A partial length recombinant SOX-10 protein (amino acids 115-269) was used as the immunogen for this antibody.

### Description

SOX10 is a transcription factor that belongs to the high mobility group (HMG) box super family of DNA-binding proteins. It is located at 22q13.1 and is highly conserved in vertebrates. SOX10 is expressed in many different cell types and tissues and implicated in neural crest development, nervous system neurogenesis, as well as differentiation of oligodendrocyte, glia and melanocytes. It modulates other transcription factors including PAX3 forming a complex and acts as a nucleocytoplasmic shuttle protein in neural crest and oligodendrocyte development. The level of expression of SOX10 plays pivotal regulatory role both in tumor progression and suppression. Its elevated expression, possess tumor-promoting activities in several malignancies including melanoma and gliomas. Decreased expression of SOX10 promotes tumor cell growth and focal adhesions of Merlin-null schwannoma cells. SOX10 may also function as a tumor suppressor by inducing tumor cell apoptosis, inhibiting invasion, regulating cell EMT and stemness through suppressing Wnt/Beta-catenin signaling. Mutations of the Sox10 gene are known to cause various combinations of hearing loss and pigmentation defects in humans such as Waardenburg syndrome, a rare auditory-pigmentary disorder that generates varying combinations of hearing loss and pigmentation defects.

### Product Info

<b>Amount :</b>	25 µg / 100 µg
<b>Purification :</b>	Protein G Chromatography
<b>Content :</b>	25 µg in 50 µl/100 µg in 200 µl PBS containing 0.05% BSA and 0.05% sodium azide. Sodium azide is highly toxic.
<b>Storage condition :</b>	Store the antibody at 4°C, stable for 6 months. For long-term storage, store at -20°C. Avoid repeated freeze and thaw cycles.

### Application Note

Western blot analysis: 1-2 µg/ml, Immunohistochemical analysis: 1 µg/ml

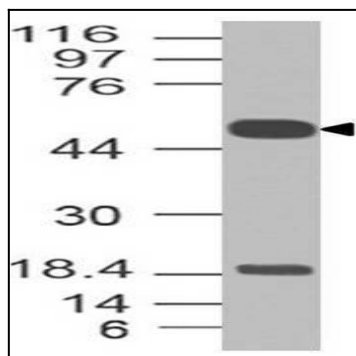


Figure-1: Western blot analysis of SOX10. Anti- SOX10 antibody (Clone: ABM42D7) was tested at 1  $\mu$ g/ml on h Kidney lysate.

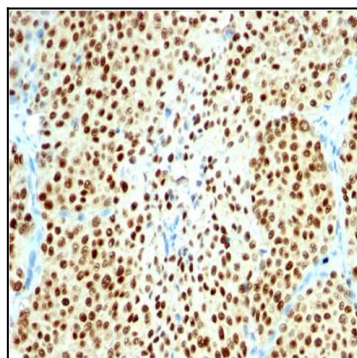


Figure-2 : Immunohistochemical analysis of SOX10 in human melanoma tissue using SOX10 antibody (Clone: ABM42D7) at 1  $\mu$ g/ml.