

Anti-CHX10 Rabbit Monoclonal Antibody

Catalog # ABO15921

Product Information

Application	WB, FC
Primary Accession	P58304
Host	Rabbit
Isotype	IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-CHX10 Rabbit Monoclonal Antibody . Tested in WB, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

Additional Information

Gene ID	338917
Other Names	Visual system homeobox 2, Ceh-10 homeodomain-containing homolog, Homeobox protein CHX10, VSX2, CHX10, HOX10
Calculated MW	39411
Application Details	WB 1:500-1:2000 FC 1:200
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: 24V98
Immunogen	A synthesized peptide derived from human CHX10
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Protein Information

Name	VSX2
Synonyms	CHX10, HOX10
Function	Acts as a transcriptional regulator through binding to DNA at the consensus sequence 5'-(TC)TAATT[AG][AG]-3' upstream of gene promoters

(PubMed:[27301076](#)). Plays a significant role in the specification and morphogenesis of the sensory retina (By similarity). May play a role in specification of V2a interneurons during spinal cord development (By similarity). Mediates differentiation of V2a interneurons by repression of motor neuron gene transcription, via competitively binding to response elements that are activated by the ISL1-LHX3 complex, such as VSX1 (PubMed:[17919464](#), PubMed:[27477290](#)). Acts as a positive transcriptional regulator of NXNL1; regulation is significantly increased in synergy with VSX1 (By similarity). Acts as a negative transcriptional regulator of MITF (By similarity). Represses SAG transcription by competitive inhibition of ISL1-LHX3 response elements (PubMed:[16236706](#), PubMed:[27477290](#)). Binds to the photoreceptor conserved element-1 (PCE-1) in the promoter of rod photoreceptor arrestin SAG and acts as a transcriptional repressor (By similarity). Involved in the development of retinal ganglion cells (RGCs) which leads to release of SHH by RGCs, promoting Hedgehog signaling and subsequent proliferation of retinal progenitor cells (By similarity). Participates in the development of the cells of the inner nuclear layer, by promoting postnatal differentiation of bipolar cells with a comparable inhibition of rod cell differentiation (By similarity). May play a role in the maintenance of neural retina identity during development by regulation of canonical Wnt genes and CTNNB1 localization, suggesting a role in the regulation of canonical Wnt signaling (PubMed:[27301076](#)).

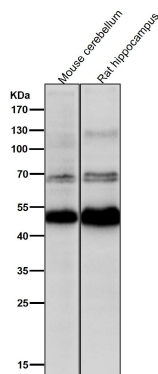
Cellular Location

Nucleus {ECO:0000250|UniProtKB:Q61412}.

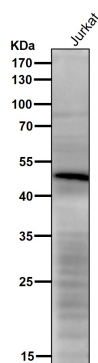
Tissue Location

Abundantly expressed in retinal neuroblasts during eye development and in the inner nuclear layer of the adult retina Within this layer, expression is stronger in the outer margin where bipolar cells predominate

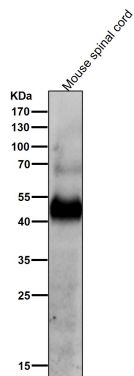
Images



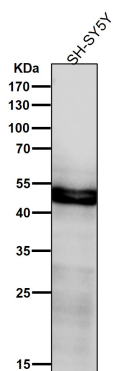
All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.



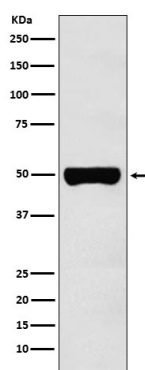
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Western blot analysis of CHX10 expression in Y79 cell lysate.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.