

# **CHX10 Antibody**

Rabbit mAb Catalog # AP92502

## **Specification**

# **CHX10 Antibody - Product Information**

Application WB, FC
Primary Accession P58304
Reactivity Rat

Clonality Monoclonal

**Other Names** 

CHX 10; HOX10; MCOP2; MCOPCB3; RET1; Vsx2;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 39411 Da

# **CHX10 Antibody - Additional Information**

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

CHX10

Description Plays a significant role in the specification

and morphogenesis of the sensory retina. May also participate in the development of

the cells of the inner nuclear layer,

particularly bipolar cells.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline ,

pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

#### CHX10 Antibody - 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:<a href="http://www.uniprot.org/citations/27301076" target="\_blank">27301076</a>). 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:<a href="http://www.uniprot.org/citations/17919464"

target="\_blank">17919464</a>, PubMed:<a href="http://www.uniprot.org/citations/27477290"



target="\_blank">27477290</a>). 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:<a href="http://www.uniprot.org/citations/16236706" target="\_blank">16236706</a>, PubMed:<a href="http://www.uniprot.org/citations/27477290" target="\_blank">27477290</a>). 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:<a href="http://www.uniprot.org/citations/27301076" target="blank">27301076</a>/a>).

#### **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

#### **CHX10 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## CHX10 Antibody - Images



