



## Rabbit Anti-CHX10 antibody

SL6621R

<b>Product Name:</b>	CHX10
<b>Chinese Name:</b>	CHX10蛋白抗体
<b>Alias:</b>	C elegans ceh 10 homeo domain containing homolog; Ceh 10 homeo domain containing homolog (C. elegans); Ceh 10 homeo domain containing homolog; Ceh 10 homeodomain containing homolog; Ceh 10 homeodomain containing homolog (C. elegans); Ceh10 homeo domain containing homolog; Ceh10 homeodomain containing homolog; CHX 10; Homeobox protein CHX 10; Homeobox protein CHX10; HOX 10; Visual system homeobox 2; HOX10; MCOP 2; MCOP2; MCOPCB 3; MCOPCB3; RET 1; RET1; Vsx 2; Vsx2.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Dog,Pig,Cow,Horse,Rabbit,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	40kDa
<b>Cellular localization:</b>	The nucleus
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human CHX10:251-361/361
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	CHX10 is a 40kDa homeodomain protein of the paired-like class that is essential for

development of the mammalian eye. Mutations in CHX10 cause microphthalmia, a cause of congenital blindness in humans, and the ocular retardation (or) phenotype in mice. In the developing mouse retina CHX10 is expressed in retinal progenitors, while in the mature retina, CHX10 expression becomes restricted to bipolar neurons. Concurrent with these expression patterns, the CHX10<sup>-/-</sup> (or) retina is thin due to a defect in proliferation of retinal progenitors, and lacks bipolar neurons. CHX10 is also expressed in the developing brainstem, thalamus, and spinal cord.

**Function:**

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 (By similarity).

**Subcellular Location:**

Nucleus.

**Tissue Specificity:**

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.

**DISEASE:**

Defects in VSX2 are the cause of microphthalmia isolated type 2 (MCOP2) [MIM:610093]; also known as isolated clinical anophthalmia. Microphthalmia is a clinically heterogeneous disorder of eye formation, ranging from small size of a single eye to complete bilateral absence of ocular tissues. Ocular abnormalities like opacities of the cornea and lens, scarring of the retina and choroid, cataract and other abnormalities like cataract may also be present.

Defects in VSX2 are the cause of microphthalmia with cataracts and iris abnormalities (MCOPCT1) [MIM:610092].

Defects in VSX2 are the cause of microphthalmia isolated with coloboma type 3 (MCOPCB3) [MIM:610092]; also known as isolated colobomatous microphthalmia 3. Ocular colobomas are a set of malformations resulting from abnormal morphogenesis of the optic cup and stalk, and the fusion of the fetal fissure (optic fissure).

**Similarity:**

Belongs to the paired homeobox family.

Contains 1 CVC domain.

Contains 1 homeobox DNA-binding domain.

**SWISS:**

P58304

**Gene ID:**

338917

**Database links:**

[Entrez Gene: 338917](#) Human

[Entrez Gene: 12677](#) Mouse

[Entrez Gene: 171360](#) Rat

[Omin: 142993](#) Human

[SwissProt: P58304](#) Human

[SwissProt: Q61412](#) Mouse

[Unigene: 449771](#) Human

[Unigene: 4405](#) Mouse

[Unigene: 92414](#) Rat

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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