



## Rabbit Anti-PHOX2A antibody

SL11577R

<b>Product Name:</b>	PHOX2A
<b>Chinese Name:</b>	先天性眼外肌纤维化相关蛋白FEOM2抗体
<b>Alias:</b>	Aristaless homeobox (Drosophila) fibrosis of extraocular muscles congenital 2 autosomal recessive; Aristaless homeobox gene homolog (Drosophila); Aristaless homeobox homolog; Aristaless homeobox protein homolog; ARIX 1 homeodomain protein; ARIX; Arix homeodomain protein; ARIX1 homeodomain protein; CFEOM 2; CFEOM2; FEOM 2; FEOM2; Fibrosis of extraocular muscles congenital 2 autosomal recessive; MGC52227; NCAM 2; NCAM2; Paired like (aristaless) Homeobox 2A; Paired like homeobox 2a; Paired mesoderm homeobox 2a; Paired mesoderm homeobox protein 2A; Paired-like homeobox 2A; PHOX 2A; Phox2; Phox2a; PHX2A_HUMAN; Pmx 2a; Pmx2; Pmx2a.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Chicken,Cow,Horse,Rabbit,Sheep,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=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>	30kDa
<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 PHOX2A:41-140/284
<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.

**PubMed:**

[PubMed](#)

The protein encoded by this gene contains a paired-like homeodomain most similar to that of the *Drosophila aristaless* gene product. The encoded protein plays a central role in development of the autonomic nervous system. It regulates the expression of tyrosine hydroxylase and dopamine beta-hydroxylase, two catecholaminergic biosynthetic enzymes essential for the differentiation and maintenance of the noradrenergic neurotransmitter phenotype. The encoded protein has also been shown to regulate transcription of the alpha3 nicotinic acetylcholine receptor gene. Mutations in this gene have been associated with autosomal recessive congenital fibrosis of the extraocular muscles. [provided by RefSeq, Jul 2008]

**Function:**

May be involved in regulating the specificity of expression of the catecholamine biosynthetic genes. Acts as a transcription activator/factor. Could maintain the noradrenergic phenotype.

**Subcellular Location:**

Nucleus.

**DISEASE:**

Defects in PHOX2A are the cause of congenital fibrosis of extraocular muscles type 2 (CFEOM2) [MIM:602078]. CFEOM encompasses several different inherited strabismus syndromes characterized by congenital restrictive ophthalmoplegia affecting extraocular muscles innervated by the oculomotor and/or trochlear nerves. CFEOM is characterized clinically by anchoring of the eyes in downward gaze, ptosis, and backward tilt of the head. CFEOM2 may result from the aberrant development of the oculomotor (nIII), trochlear (nIV) and abducens (nVI) cranial nerve nuclei.

**Similarity:**

Belongs to the paired homeobox family.  
Contains 1 homeobox DNA-binding domain.

**SWISS:**

O14813

**Gene ID:**

401

**Database links:**

[Entrez Gene: 401](#) Human

[Entrez Gene: 11859](#) Mouse

[Entrez Gene: 116648](#) Rat

**Product Detail:**

[Oimim: 602753](#) Human

[SwissProt: O14813](#) Human

[SwissProt: Q62066](#) Mouse

[SwissProt: Q62782](#) Rat

[Unigene: 705937](#) Human

[Unigene: 5028](#) Mouse

[Unigene: 2858](#) 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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