



## Rabbit Anti-Six3 antibody

SL11970R

<b>Product Name:</b>	Six3
<b>Chinese Name:</b>	晶状体发育相关蛋白Six3抗体
<b>Alias:</b>	Homeobox protein SIX3; HPE2; Sine oculis homeobox homolog 3; SIX homeobox 3; Six3; SIX3_HUMAN.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Dog,Pig,Cow,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>	35kDa
<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 Six3:151-250/332
<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>	The Six proteins (sine oculis) are a family of homeodomain transcription factors that share a conserved DNA binding domain. Six3 is required for the specification and proliferation of the eye field in vertebrates and may be involved in some developmental disorders of the brain. Expression of Six3 is detected in human embryos as early as five to seven weeks of gestation, and is maintained in the eye throughout the entire period of fetal development. At 20 weeks of gestation, expression of Six3 in the human retina has

been observed in ganglion cells and in cells of the inner nuclear layer. Six3 maps to human chromosome 2p16-p21, between genetic markers D2S119 and D2S288. The map position of human Six3 overlaps the positions of two dominant disorders (holoprosencephaly type 2 and Malattia leventinese) with ocular phenotypes that have been assigned to this chromosomal region.

**Function:**

May be involved in visual system development.

**Subcellular Location:**

Nucleus.

**DISEASE:**

Defects in SIX3 are the cause of holoprosencephaly type 2 (HPE2) [MIM:157170]. Holoprosencephaly (HPE) [MIM:236100] is the most common structural anomaly of the brain, in which the developing forebrain fails to correctly separate into right and left hemispheres. Holoprosencephaly is genetically heterogeneous and associated with several distinct facies and phenotypic variability.

**Similarity:**

Belongs to the SIX/Sine oculis homeobox family.  
Contains 1 homeobox DNA-binding domain.

**SWISS:**

O95343

**Gene ID:**

6496

**Database links:**

[Entrez Gene: 6496](#)Human

[Entrez Gene: 20473](#)Mouse

[Entrez Gene: 78974](#)Rat

[Omim: 603714](#)Human

[SwissProt: O95343](#)Human

[SwissProt: Q62233](#)Mouse

**Important Note:**

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

