

Rabbit Anti-Six3 antibody

SL11970R

Product Name Six3

Chinese Name 晶状体发育相关蛋白 Six3 抗体

Alias Homeobox protein SIX3; HPE2; Sine oculis homeobox homolog 3; SIX homeobox 3; Six3; SIX

Research Area Cell biology Developmental biology Neurobiology transcriptional regulatory factor Epigenetics

Immunogen Species Rabbit

Clonality Polyclonal

React Species (predicted: Human, Mouse, Rat, Dog, Pig, Cow, Rabbit, Sheep,)
WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA
(Paraffin sections need antigen repair)

Applications not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

Theoretical molecular weight 35kDa

Cellular localization The nucleus

Form Liquid

Concentration 1mg/ml

immunogen KLH conjugated synthetic peptide derived from human Six3: 151-250/332

Lsotype IgG

Purification affinity purified by Protein A

Buffer Solution 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

Storage Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

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

PubMed [PubMed](#)

Product Detail 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.

involved in some developmental disorders of the brain. Expression of Six3 is detected in human eye as five to seven weeks of gestation, and is maintained in the eye throughout the entire period of development. At 20 weeks of gestation, expression of Six3 in the human retina has been observed in cells and in cells of the inner nuclear layer. Six3 maps to human chromosome 2p16-p21, between markers D2S119 and D2S288. The map position of human Six3 overlaps the positions of two domains (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 [MIM:236100] is the most common structural anomaly of the brain, in which the developing forebrain does not 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