



Rabbit Anti-Zic2 antibody

SL11610R

Product Name:	Zic2
Chinese Name:	Zinc finger proteinZic2抗体
Alias:	HPE 5; HPE5; Odd paired homolog Drosophila; Zic 2; Zic family member 2 (odd paired Drosophila homolog); Zic family member 2; ZIC2; ZIC2_HUMAN; Zinc finger protein of the cerebellum 2; Zinc finger protein ZIC 2; Zinc finger protein Zic2.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Pig,Cow,Sheep,
Applications:	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.
Molecular weight:	55kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Zic2:201-300/532
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	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
Product Detail:	This gene encodes a member of the ZIC family of C2H2-type zinc finger proteins. This protein functions as a transcriptional repressor and may regulate tissue specific expression of dopamine receptor D1. Mutations in this gene cause holoprosencephaly type 5. Holoprosencephaly is the most common structural anomaly of the human brain. A polyhistidine tract polymorphism in this gene may be associated with increased risk of

neural tube defects. This gene is closely linked to a gene encoding zinc finger protein of the cerebellum 5, a related family member on chromosome 13. [provided by RefSeq, Jul 2008]

Function:

Acts as a transcriptional activator or repressor. Plays important roles in the early stage of organogenesis of the CNS. Activates the transcription of the serotonin transporter SERT in uncrossed ipsilateral retinal ganglion cells (iRGCs) to refine eye-specific projections in primary visual targets. Its transcriptional activity is repressed by MDFIC. Involved in the formation of the ipsilateral retinal projection at the optic chiasm midline. Drives the expression of EPHB1 on ipsilaterally projecting growth cones. Binds to the minimal GLI-consensus sequence 5'-TGGGTGGTC-3'. Associates to the basal SERT promoter region from ventrotemporal retinal segments of retinal embryos.

Subcellular Location:

Nucleus. Cytoplasm. Localizes in the cytoplasm in presence of MDFIC overexpression. Both phosphorylated and unphosphorylated forms are localized in the nucleus.

Post-translational modifications:

Phosphorylated.

Ubiquitinated by RNF180, leading to its degradation.

DISEASE:

Defects in ZIC2 are a cause of holoprosencephaly type 5 (HPE5) [MIM:609637]. A 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. Although severe facial anomalies are common in HPE, patients with ZINC2 mutations have relatively normal faces.

Similarity:

Belongs to the GLI C2H2-type zinc-finger protein family.

Contains 5 C2H2-type zinc fingers.

SWISS:

O95409

Gene ID:

7546

Database links:

[Entrez Gene: 7546](#)Human

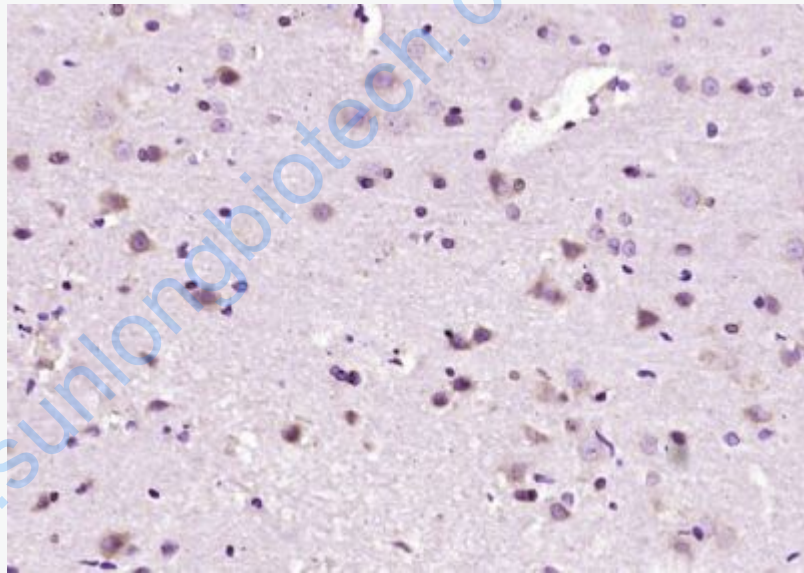
[Entrez Gene: 22772](#)Mouse

[Entrez Gene: 361096](#)Rat

[Omid: 603073](#)Human
[SwissProt: O95409](#)Human
[SwissProt: Q62520](#)Mouse
[Unigene: 653700](#)Human
[Unigene: 308936](#)Mouse
[Unigene: 64359](#)Rat

Important Note:

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



Picture:

Paraformaldehyde-fixed, paraffin embedded (rat brain tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Zic2) Polyclonal Antibody, Unconjugated (SL11610R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.