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Zic2 Rabbit pAb

Catalog # AP98455

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	O95409
Other Accession	O95409
Reactivity	Rat
Predicted	Pig, Human, Mouse, Chicken, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	55006
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Zic2
Epitope Specificity	201-300/532
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the GLI C2H2-type zinc-finger protein family. Contains 5 C2H2-type zinc fingers.
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.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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]

Additional Information

Gene ID	7546
Other Names	HPE5; Ku; ZIC2_HUMAN; ZIC2; Zinc finger protein of the cerebellum 2; ZIC2_MOUSE; Zic family zinc finger 2; Zic family member 2; Zic family member 2 (odd-paired Drosophila homolog); Zic family member 2 (odd-paired

	homolog, Drosophila)
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Protein Information

Name	ZIC2
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.
Cellular Location	Nucleus. Cytoplasm. Note=Localizes in the cytoplasm in presence of MDFIC overexpression. Both phosphorylated and unphosphorylated forms are localized in the nucleus (By similarity).

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