

Anti-ZIC-2 (RABBIT) Antibody ZIC-2 Antibody Catalog # ASR5290

Specification

Anti-ZIC-2 (RABBIT) Antibody - Product Information

| Host Conjugate Target Species Reactivity Clonality Application Application Note | Rabbit Unconjugated Mouse Rat, Mouse Polyclonal WB, E, I, LCI This affinity purified antibody has been tested for use in ELISA and by western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 55 kDa in size corresponding to ZIC2 by western blotting in the appropriate cell lysate or extract. |
|---|--|
| Physical State Buffer | Liquid (sterile filtered) 0.02 M Potassium Phosphate, 0.15 M |
| Immunogen | Sodium Chloride, pH 7.2 This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region near amino acids 180-210 of Mouse ZIC-2. |
| Preservative | 0.01% (w/v) Sodium Azide |

Anti-ZIC-2 (RABBIT) Antibody - Additional Information

Purity

This affinity purified antibody is directed against mouse ZIC2 protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest reactivity with this protein from human, chimpanzee, mouse, rat and dog based on 100% homology for the immunogen sequence. Expect cross reactivity with ZIC2 from chicken, zebrafish and frog as the core 16 amino acid residues within the immunogen sequence show very high degrees of homology with ZIC2 from these sources. Cross reactivity with ZIC2 homologues from other sources has not been determined.

Storage Condition

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.



Anti-ZIC-2 (RABBIT) Antibody - 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

Tissue Location

CNS. A high level expression is seen in the cerebellum

Anti-ZIC-2 (RABBIT) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-ZIC-2 (RABBIT) Antibody - Images



Western blot using Rockland's Affinity Purified anti-ZIC2 antibody. Lane 1: mouse brain lysate. Lane 2: rat brain lysate. Load: 20 μ g. Primary Antibody: anti-ZIC2 at 1:500 dilution. The upper band in the mouse brain lysate represents Zic2 ~55 kDa.



Anti-ZIC-2 (RABBIT) Antibody - Background

ZIC2 (also known as zinc finger protein of the cerebellum 2, HPE5, Zic family member 2 and odd-paired Drosophila homolog) is a nuclear protein that functions as a transcriptional repressor and may regulate tissue specific expression of dopamine receptor D1. In mouse, knockout of Zic1 leads to aplasia of cerebellum and skeletal abnormalities. Mutation in Zic2 and Zic3 in mouse and/or human cause holoprosencephaly and heterotaxis, respectively. Holoprosencephaly is the most common structural anomaly of the human brain.