

Anti-Zic-1 (Mouse/Human) (RABBIT) Antibody - 200-401-159
Code: 200-401-159

Size: 100 µg

Product Description: Anti-Zic-1 (Mouse/Human) (RABBIT) Antibody - 200-401-159

Concentration: 1.0 mg/mL by UV absorbance at 280 nm

PhysicalState: Liquid (sterile filtered)

Label	Unconjugated
Host	Rabbit
Gene Name	Zic1
Species Reactivity	human, mouse
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Stabilizer	None
Preservative	0.01% (w/v) Sodium Azide
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.
Synonyms	rabbit anti-Zic-1 Antibody, Odd paired homolog Drosophila antibody, Zic 1 antibody, ZIC antibody, Zic family member 1 (odd-paired Drosophila homolog) antibody, Zic family member 1 antibody
Application Note	Anti Zic-1 Antibody is suitable for western blotting and for ELISA. Researchers should determine optimal titers for applications that are not stated below.
Background	Anti Zic-1 Antibody recognizes the product of the Zic-1 gene, that encodes a zinc finger protein which is expressed in the developing or matured central nervous system in a highly restricted manner. Zic-1 is expressed in granule cells that make synaptic contact with Purkinje cells. Clearly Zic-1 is a gene critical to cerebellar pattern formation. The expression of Zic genes is first detected at gastrulation and at neurulation, becomes restricted to the dorsal neural ectoderm and the dorsal paraxial mesoderm. Zic-2 and Zic-3 are highly similar genes, especially in their product's zinc finger motif and by comparison of their genomic organization in that they share common exon-intron boundaries and belong to the same gene family. By comparison in function, Zic-2 is essential for the formation of the brain and Zic-3 is important for right and left axis formation. The Zic-1 gene has been mapped to chromosome 9 in mouse. The 5' flanking region of the Zic-1 gene contains a region-specific enhancer determined to be essential in in vivo and in vitro deletion analysis. The temporal profile of mRNA expression differs for each of the Zic gene products. The Drosophila odd-paired gene is highly homologous to the Zic gene family.
Purity And Specificity	This is an IgG preparation of whole rabbit antiserum purified by a multi-step process which includes delipidation, salt fractionation and ion exchange chromatography followed by extensive dialysis against the buffer stated above. This antibody is directed against Zic-1 from mouse. In general, this antibody also detects human Zic-1. Cross-reactivity with other species is likely but has not been determined.
Assay Dilutions	User Optimized
ELISA	1:10,000 - 1:50,000
Western Blot	1:5,000
Immunohistochemistry	1:400
IF Microscopy	1:400
Other Assays	User Optimized
Expiration	Expiration date is one (1) year from date of opening.
Immunogen	The whole rabbit serum used to produce this IgG fraction antibody was prepared by repeated immunizations with an 18 aa synthetic peptide from a region near the N-Terminus of mouse Zic-1. This domain is completely conserved in human ZIC-1.
General Reference	Aruga, J., et al. (1996). The mouse zic gene family. Homologues of the Drosophila pair-rule gene odd-paired. J. Biol. Chem. 12:271(2): 1043-7. Mikoshiba, K., (1999). Mamalian neural induction and brain pattern formation. Keio J. Med. Sep48(3): 111-23. Nagai, T. et al., (1997). The expression of the mouse Zic1, Zic2, and Zic3 gene suggests an essential role for Zic genes in body pattern formation. Dev. Biol. Feb15;182(2): 299-313.

Related Products

100-401-149	Anti-EGFR (RABBIT) Antibody - 100-401-149
600-401-928	Anti-EGFR pY1197 (RABBIT) Antibody - 600-401-928
611-1302	Anti-RABBIT IgG (H&L) (GOAT) Antibody Peroxidase Conjugated - 611-1302
B304	NORMAL GOAT SERUM (NGS) - B304

Related Links

UniProtKB - P46684

<http://www.uniprot.org/uniprot/P46684>

NCBI - <http://www.ncbi.nlm.nih.gov/protein/AAH60247.1>
AAH60247.1

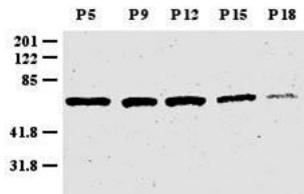
GeneID - 22771

<http://www.ncbi.nlm.nih.gov/gene/22771>

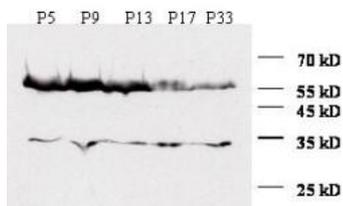
NCBI - http://www.ncbi.nlm.nih.gov/protein/NP_033599.2
NP_033599.2

Images

- 1 Western blot. Analysis of Zic1 in mouse cerebellum extract. Protein extracts were prepared from mouse cerebellum between postnatal day 5 (P5) and P18, as indicated above the lanes. ROCKLAND Immunochemical's anti-Zic1 antibody recognizes a single band in all extracts. The positions of the molecular weight markers (in kDa) in the gel are indicated on the left. Personnel communication, C. Kurschner.



- 2 A similar time course experiment is shown using mouse cerebellum extracts at various time points. A 10% SDS-PAGE gel was used to separate proteins prior to transfer to nitrocellulose. The membrane was probed with a 1:5,000 dilution of the antibody. The lower minor band may be a breakdown product of Zic1 or it may represent cross reactivity of the detection antibody. HRP conjugated anti-Rabbit IgG (Chemicon) was used at a 1,000 dilution. Personnel communication, K.H. Herzog.



Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.