

Product Datasheet

ZIC1 Antibody - BSA Free NB600-488

Unit Size: 0.1 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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NB600-488

ZIC1 Antibody - BSA Free

Product Information	
Unit Size	0.1 ml
Concentration	1.0 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.01% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS and 30% Glycerol

Product Description	
Description	Novus Biologicals Rabbit ZIC1 Antibody - BSA Free (NB600-488) is a polyclonal antibody validated for use in IHC, WB and ICC/IF. Anti-ZIC1 Antibody: Cited in 5 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Rabbit
Gene ID	7545
Gene Symbol	ZIC1
Species	Human, Mouse
Reactivity Notes	Predicted to react with rat based on 100% sequence homology.
Marker	Ectoderm Marker
Immunogen	A synthetic peptide made to an internal portion of the human Zic1 protein (between residues 20-75) [UniProt Q15915]

Product Application Details	
Applications	Western Blot, Immunohistochemistry-Paraffin, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen
Recommended Dilutions	Western Blot 1:1000, Immunohistochemistry 1:400, Immunocytochemistry/Immunofluorescence 1:10-1:500, Immunohistochemistry-Paraffin 1:400, Immunohistochemistry-Frozen reported in scientific literature (PMID 23862012)
Application Notes	Prior to immunostaining paraffin tissues, antigen retrieval with sodium citrate buffer (pH 6.0) is recommended.

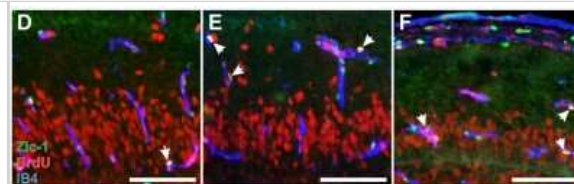
Images

Western Blot: ZIC1 Antibody [NB600-488] - WB analysis of Zic1 in overexpression lysate.

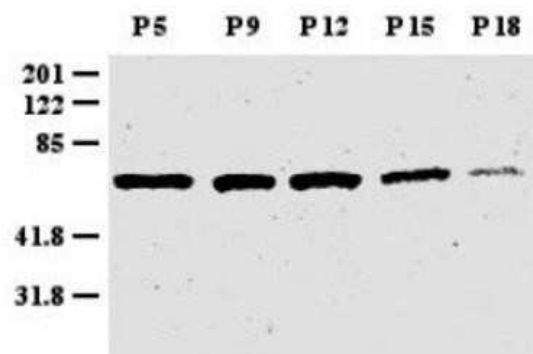
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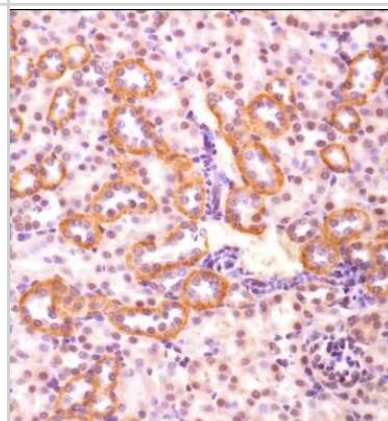
Immunohistochemistry-Paraffin: ZIC1 Antibody [NB600-488] - Altered brain pericyte proliferation in *Foxc1* mutants. Triple immunofluorescence for Zic1 (pericyte nuclei; green), BrdU (red) and IB4 (blue) highlight proliferating (Zic1+/BrdU+; arrows) pericytes in the E14.5 cerebral vasculature of WT, *Foxc1*^{h/h} and *Foxc1*^{l/l} embryos. Image collected and cropped by CiteAb from the following publication (<https://bio.biologists.org/cgi/doi/10.1242/bio.20135009>), licensed under a CC-BY license.



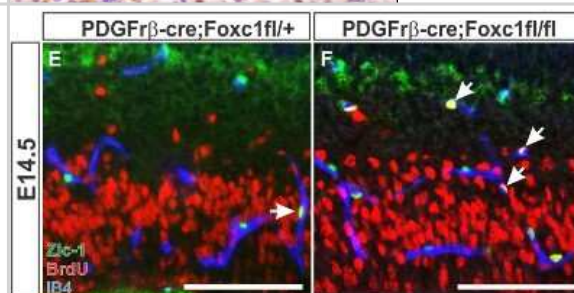
Western Blot: ZIC1 Antibody [NB600-488] - Western blot analysis of Zic1 in mouse cerebellum extract. Protein extracts were prepared from mouse cerebellum between postnatal day 5 (P5) and P18, as indicated above the lanes.



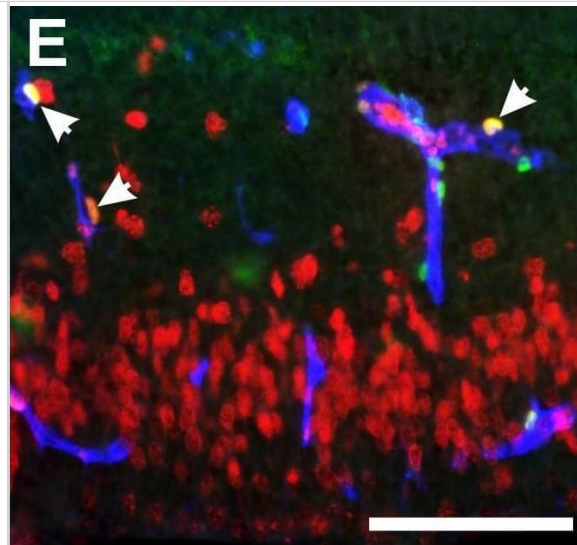
Immunohistochemistry: ZIC1 Antibody [NB600-488] - IHC analysis of Zic1 in mouse kidney using DAB with hematoxylin counterstain.



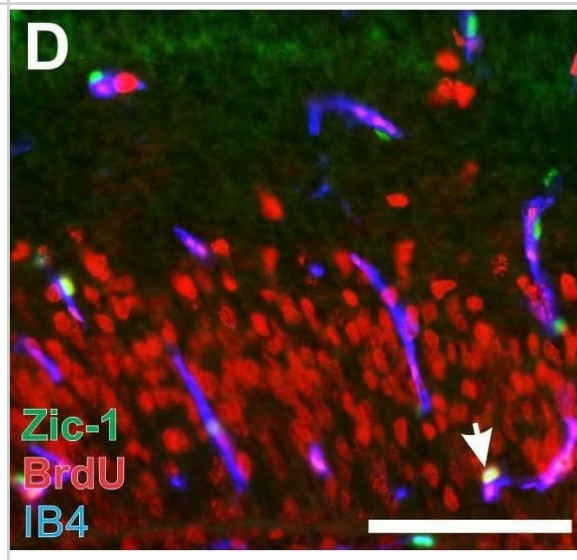
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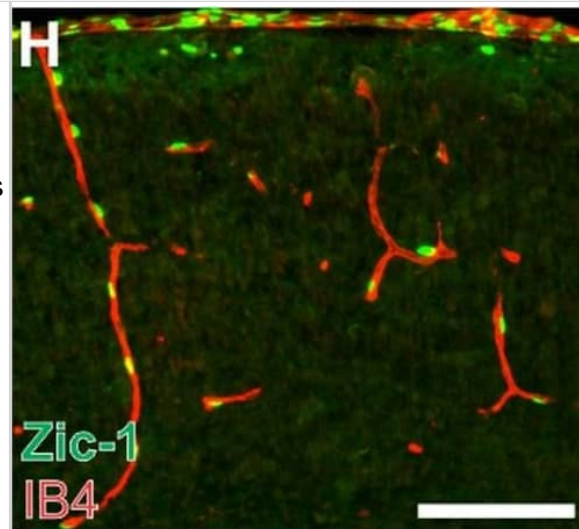
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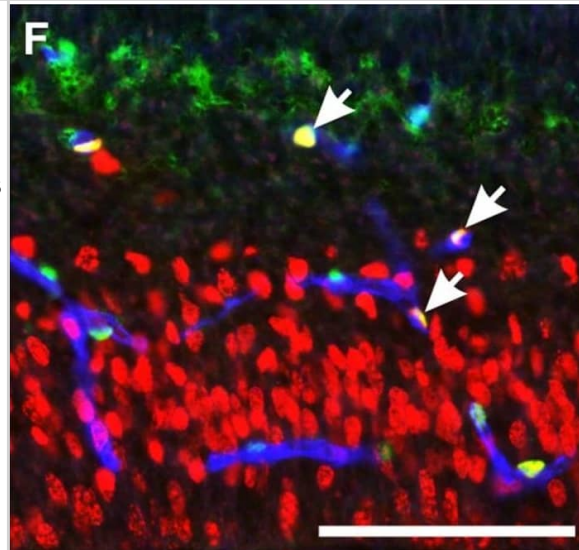
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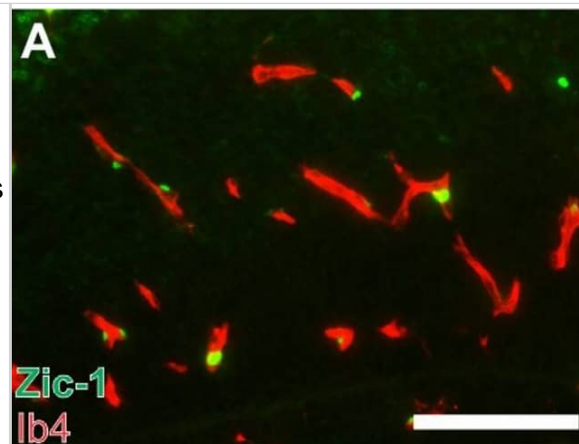
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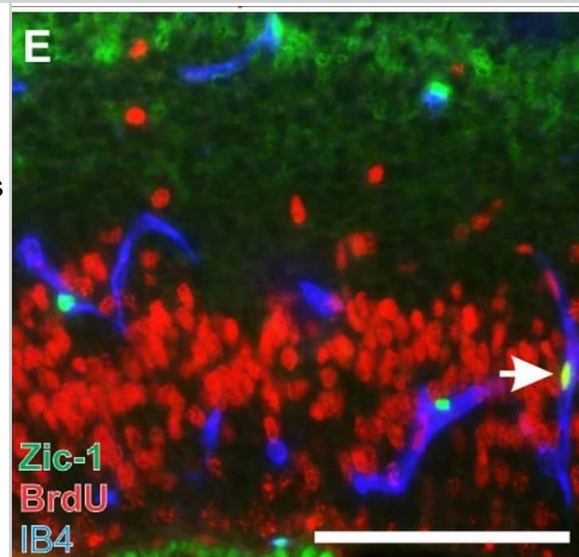
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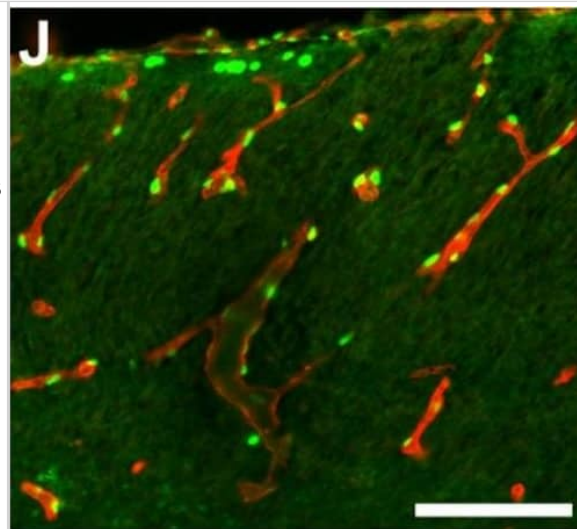
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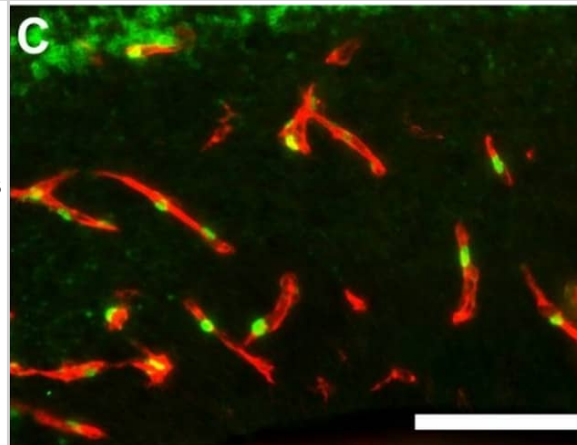
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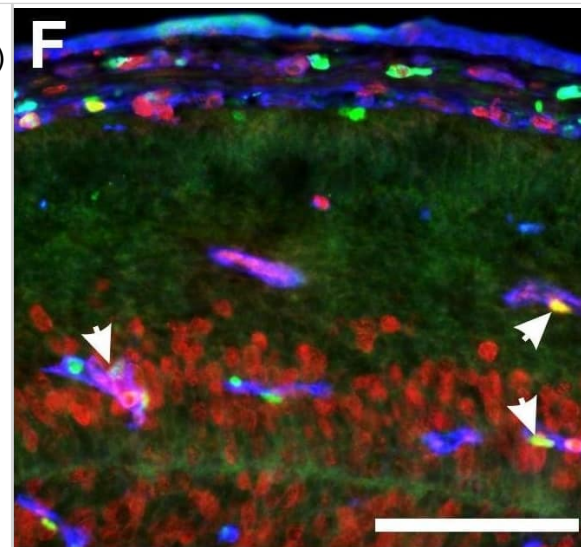
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Publications

Garcia-Moreno F, Pedraza M, Di Giovannantonio LG et al. A neuronal migratory pathway crossing from diencephalon to telencephalon populates amygdala nuclei. *Nat Neurosci* 13(6):680-9. 2010-06-01 [PMID: 20495559]

Di Giovannantonio LG, Di Salvio M, Omodei D et al. Otx2 cell-autonomously determines dorsal mesencephalon versus cerebellum fate independently of isthmic organizing activity. *Development* 2014-01-01 [PMID: 24335253] (IHC-P, Mouse)

Siegenthaler JA, Choe Y, Patterson KP et al. Foxc1 is required by pericytes during fetal brain angiogenesis. *Biol Open* 2013-05-20 [PMID: 23862012] (IHC-Fr, ICC/IF, Mouse)

Zhou Y, Jiang H, Gu J et al. MicroRNA-195 targets ADP-ribosylation factor-like protein 2 to induce apoptosis in human embryonic stem cell-derived neural progenitor cells. *Cell Death Dis* 2013-06-27 [PMID: 23807224] (ICC/IF, Human)

Lipchina I, Elkabetz Y, Hafner M et al. Genome-wide identification of microRNA targets in human ES cells reveals a role for miR-302 in modulating BMP response. *Genes Dev*;25(20):2173-2186. 2011-10-15 [PMID: 22012620]

Procedures

Western Blot protocol for ZIC1 Antibody (NB600-488)

ZIC1 Antibody:

Western Blot Protocol

1. Perform SDS-PAGE on samples to be analyzed, loading 40 ug of total protein per lane.
2. Transfer proteins to membrane according to the instructions provided by the manufacturer of the membrane and transfer apparatus.
3. Stain according to standard Ponceau S procedure (or similar product) to assess transfer success, and mark molecular weight standards where appropriate.
4. Rinse the blot.
5. Block the membrane using standard blocking buffer for at least 1 hour.
6. Wash the membrane in wash buffer three times for 10 minutes each.
7. Dilute primary antibody in blocking buffer and incubate 1 hour at room temperature.
8. Wash the membrane in wash buffer three times for 10 minutes each.
9. Apply the diluted HRP conjugated secondary antibody in blocking buffer (as per manufacturers instructions) and incubate 1 hour at room temperature.
10. Wash the blot in wash buffer three times for 10 minutes each (this step can be repeated as required to reduce background).
11. Apply the detection reagent of choice in accordance with the manufacturers instructions.

**Note: Tween-20 can be added to the blocking or antibody dilution buffer at a final concentration of 0.05-0.2%.

Immunohistochemistry-Paraffin protocol for ZIC1 Antibody (NB600-488)

ZIC1 Antibody:

Immunohistochemistry-Paraffin Embedded Sections

Antigen Unmasking:

Bring slides to a boil in 10 mM sodium citrate buffer (pH 6.0) then maintain at a sub-boiling temperature for 10 minutes. Cool slides on bench-top for 30 minutes.

Staining:

1. Wash sections in deionized water three times for 5 minutes each.
2. Wash sections in wash buffer for 5 minutes.
3. Block each section with 100-400 ul blocking solution for 1 hour at room temperature.
4. Remove blocking solution and add 100-400 ul diluted primary antibody. Incubate overnight at 4C.
5. Remove antibody solution and wash sections in wash buffer three times for 5 minutes each.
6. Add 100-400 ul biotinylated diluted secondary antibody. Incubate 30 minutes at room temperature.
7. Remove secondary antibody solution and wash sections three times with wash buffer for 5 minutes each.
8. Add 100-400 ul Streptavidin-HRP reagent to each section and incubate for 30 minutes at room temperature.
9. Wash sections three times in wash buffer for 5 minutes each.
10. Add 100-400 ul DAB substrate to each section and monitor staining closely.
11. As soon as the sections develop, immerse slides in deionized water.
12. Counterstain sections in hematoxylin.
13. Wash sections in deionized water two times for 5 minutes each.
14. Dehydrate sections.
15. Mount coverslips.





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