abcam

Product datasheet

Anti-Zic1 antibody [EPR7291(2)] ab134951

Recombinant RabMAb

★★★☆☆ **6 Abreviews**　　**6 References**　　7 Images

Overview

Product name	Anti-Zic1 antibody [EPR7291(2)]
Description	Rabbit monoclonal [EPR7291(2)] to Zic1
Host species	Rabbit
Tested applications	**Suitable for:** Flow Cyt (Intra), WB, ICC/IF
Species reactivity	**Reacts with:** Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers. (Peptide available as **ab201520**)
Positive control	Human cerebellum lysate, Human brain, Human fetal brain lysate, SH SY5Y cell lysate, SW480 cells.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information **see here**.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol (glycerin, glycerine), 0.05% BSA, 59% PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR7291(2)

Isotype	IgG

Applications

Our **Abpromise guarantee** covers the use of ab134951 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/70. **ab172730** - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody. For unpurified use at 1/100 - 1/1000.
WB	★★★★★ (2)	1/1000 - 1/10000. Predicted molecular weight: 48 kDa.Can be blocked with **Zic1 peptide (ab201520)**.
ICC/IF		1/100 - 1/250.

Target

|	
Function	Acts as a transcriptional activator. Involved in neurogenesis. Plays important roles in the early stage of organogenesis of the CNS, as well as during dorsal spinal cord development and maturation of the cerebellum. Involved in the spatial distribution of mossy fiber (MF) neurons within the pontine gray nucleus (PGN). Plays a role in the regulation of MF axon pathway choice. Promotes MF migration towards ipsilaterally-located cerebellar territories. May have a role in shear flow mechanotransduction in osteocytes. Retains nuclear GLI1 and GLI3 in the cytoplasm. Binds to the minimal GLI-consensus sequence 5'-TGGGTGGTC-3'.
Tissue specificity	CNS. A high level expression is seen in the cerebellum. Detected in the nuclei of the cerebellar granule cell lineage from the progenitor cells of the external germinal layer to the postmigrated cells of the internal granular layer. Detected in medulloblastoma (26/29 cases), but not present in all other tumors examined.
Sequence similarities	Belongs to the GLI C2H2-type zinc-finger protein family. Contains 5 C2H2-type zinc fingers.
Domain	The C2H2-type 3, 4 and 5 zinc finger domains are necessary for transcription activation.
Cellular localization	Nucleus. Cytoplasm. Localizes in the cytoplasm in presence of MDFIC overexpression.

Images
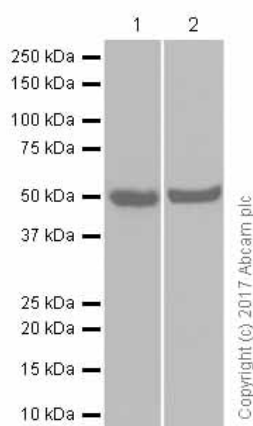
Western blot - Anti-Zic1 antibody [EPR7291(2)] (ab134951)

All lanes : Anti-Zic1 antibody [EPR7291(2)] (ab134951) at 1/2000 dilution (purified)

Lane 1 : Human brain lysates
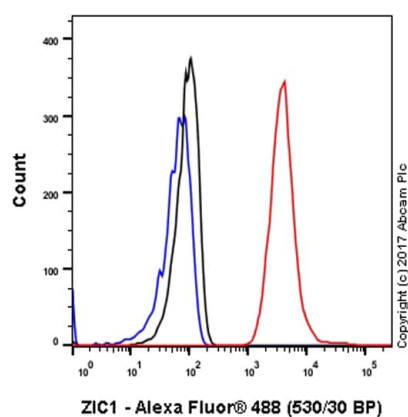
Lane 2 : Human cerebellum lysates

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 48 kDa

Blocking and diluting buffer: 5% NFDM/TBST.

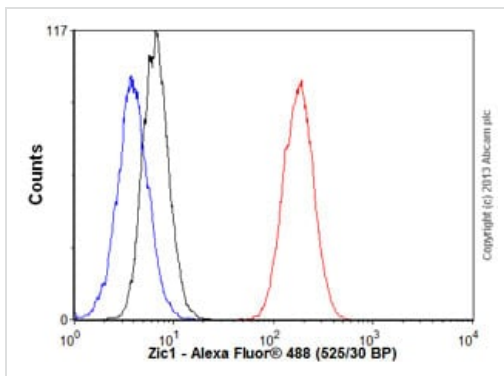Flow Cytometry (Intracellular) - Anti-Zic1 antibody [EPR7291(2)] (ab134951)

Intracellular Flow Cytometry analysis of SH-SY5Y (Human neuroblastoma epithelial cell) cells labeling Zic1 with purified ab134951 at 1/70 dilution (red). Cells were fixed with 4% Paraformaldehyde. A Goat anti rabbit IgG (Alexa Fluor® 488) secondary antibody was used at 1/2000 dilution. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).
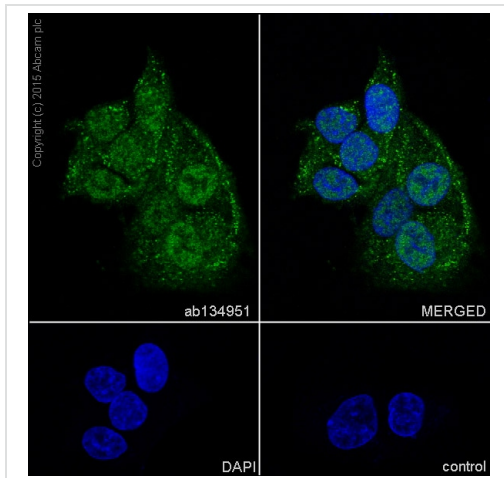
Immunocytochemistry/ Immunofluorescence - Anti-Zic1 antibody [EPR7291(2)] (ab134951)

Immunocytochemistry/ Immunofluorescence analysis of SH-SY5Y (Human neuroblastoma epithelial cell) cells labeling Zic1 with Purified ab134951 at 1:200 dilution. Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. **ab150077** Goat anti rabbit IgG(Alexa Fluor ® 488) was used as the secondary antibody at 1:1000 dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.

Flow Cytometry (Intracellular) - Anti-Zic1 antibody [EPR7291(2)] (ab134951)

Overlay histogram showing SH-SY5Y cells stained with unpurified ab134951 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab134951, 1/1000 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor$^®$ 488 goat anti-rabbit IgG (H&L) (**ab150077**) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (0.1µg/1x10^6 cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter. This antibody gave a positive signal in SH-SY5Y cells fixed with 4% paraformaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.
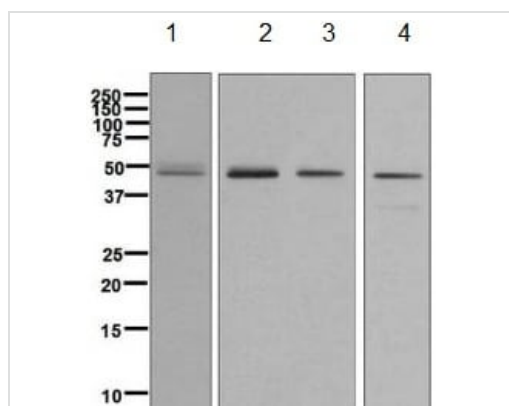
Western blot - Anti-Zic1 antibody [EPR7291(2)] (ab134951)

All lanes : Anti-Zic1 antibody [EPR7291(2)] (ab134951) at 1/1000 dilution (unpurified)

Lane 1 : Human cerebellum tissue lysate

Lane 2 : Human fetal brain tissue lysate
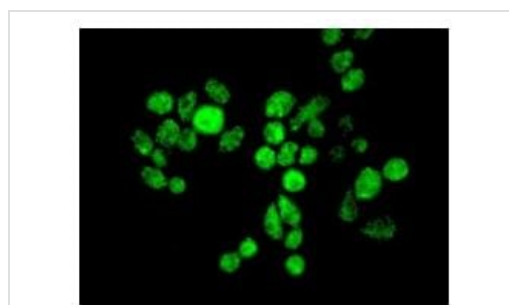
Lane 3 : SH SY5Y cell lysate

Lane 4 : SW480 cell lysate

Lysates/proteins at 10 μg per lane.

Secondary

All lanes : HRP labelled goat anti rabbit at 1/2000 dilution

Predicted band size: 48 kDa

Immunocytochemistry/ Immunofluorescence - Anti-Zic1 antibody [EPR7291(2)] (ab134951)

Immunofluorescent staining of SW480 cells labelling Zic1 with unpurified ab134951 at 1/100 dilution

Anti-Zic1 antibody [EPR7291(2)] (ab134951)

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