


Product datasheet

Anti-NeuroD1 antibody [EPR4008] ab109224

Recombinant **RabMAb**

★★★★★ [1 Abreviews](#) [13 References](#) [3 Images](#)

Overview

Product name	Anti-NeuroD1 antibody [EPR4008]
Description	Rabbit monoclonal [EPR4008] to NeuroD1
Host species	Rabbit
Tested applications	Suitable for: ICC/IF, WB Unsuitable for: Flow Cyt or IHC-P
Species reactivity	Reacts with: Mouse, Human Predicted to work with: Rat 
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Y79 and fetal brain lysates; ICC/IF: Mouse primary neuron cells.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

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: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR4008

Isotype

IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab109224 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
ICC/IF		1/200.
WB	★★★★★ (1)	1/1000 - 1/10000. Detects a band of approximately 47 kDa (predicted molecular weight: 40 kDa).

Application notes

Is unsuitable for Flow Cyt or IHC-P.

Target

Function

Differentiation factor required for dendrite morphogenesis and maintenance in the cerebellar cortex. Transcriptional activator. Binds to the insulin gene E-box.

Involvement in disease

Defects in NEUROD1 are the cause of maturity-onset diabetes of the young type 6 (MODY6) [MIM:606394]. MODY is a form of diabetes that is characterized by an autosomal dominant mode of inheritance, onset in childhood or early adulthood (usually before 25 years of age), a primary defect in insulin secretion and frequent insulin-independence at the beginning of the disease.

Sequence similarities

Contains 1 basic helix-loop-helix (bHLH) domain.

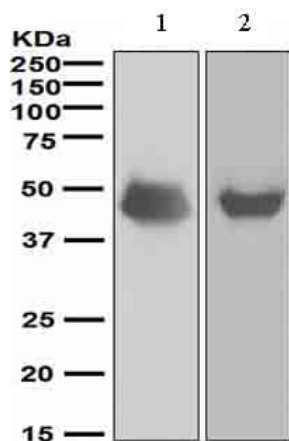
Post-translational modifications

Phosphorylated. In islet cells, phosphorylated on Ser-274 upon glucose stimulation; which may be required for nuclear localization. In activated neurons, phosphorylated on Ser-335; which promotes dendritic growth.

Cellular localization

Cytoplasm. Nucleus.

Images



Western blot - Anti-NeuroD1 antibody [EPR4008] (ab109224)

All lanes : Anti-NeuroD1 antibody [EPR4008] (ab109224) at 1/1000 dilution

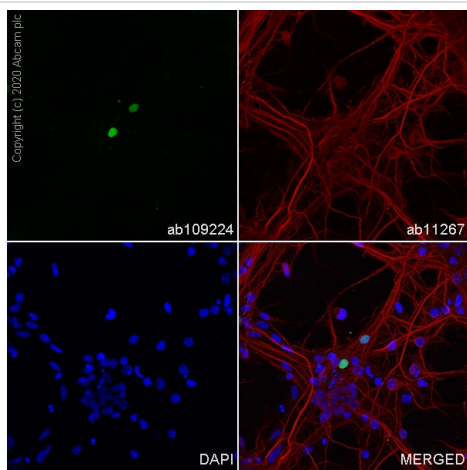
Lane 1 : Y79 lysates

Lane 2 : Fetal brain lysates

Lysates/proteins at 10 µg per lane.

Predicted band size: 40 kDa

Observed band size: 47 kDa



Immunocytochemistry/ Immunofluorescence - Anti-NeuroD1 antibody [EPR4008] (ab109224)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized mouse primary neuron cells labelling NeuroD1 with ab109224 at 1/200 dilution, followed by **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) antibody at 1/1000 dilution (2 µg/mL) (Green). Confocal image showing nuclear staining in a little of mouse primary neuron cell. Confocal scanning Z step was set as 0.3 µm followed by image processing with maximum Z projection. **ab11267** Anti-MAP2 mouse monoclonal antibody was used to counterstain tubulin at 1/500 dilution (4 µg/mL) followed by **ab150120** Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) at 1/1000 dilution (2 µg/mL) (Red). The nuclear counterstain was DAPI (Blue).

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-NeuroD1 antibody [EPR4008] (ab109224)

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- Response to your inquiry within 24 hours

- We provide support in Chinese, English, French, German, Japanese and Spanish
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- We investigate all quality concerns to ensure our products perform to the highest standards

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