

Product datasheet

Anti-GAD1 antibody ab228710

★ ★ ★ ★ ★ 1 Abreviews 4 Images

Overview

Product name	Anti-GAD1 antibody
Description	Rabbit polyclonal to GAD1
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, ICC/IF
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Recombinant fragment within Human GAD1 (internal sequence). The exact sequence is proprietary. Database link: Q99259
Positive control	WB: Mouse and rat brain whole tissue extracts; HEK-293T whole cell lysate. ICC/IF: DIV9 rat E18 primary cortical neurons. IHC/P: Adult mouse retina.
General notes	<p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.</p> <p>In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications & species that this product has been "predicted to work with," however this information is not covered by our Abpromise guarantee.</p> <p>Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.</p> <p>Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.</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. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.00 Preservative: 0.025% Proclin 300 Constituents: 79% PBS, 20% Glycerol (glycerin, glycerine)
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab228710** in the following tested applications.

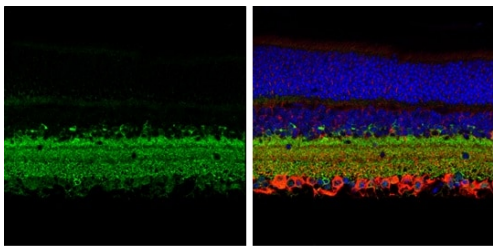
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★ ★ ★ ★ ★	1/500 - 1/3000. Predicted molecular weight: 67 kDa.
IHC-P		1/100 - 1/1000.
ICC/IF		1/100 - 1/1000.

Target

Function	Catalyzes the production of GABA.
Tissue specificity	Isoform 3 is expressed in pancreatic islets, testis, adrenal cortex, and perhaps other endocrine tissues, but not in brain.
Involvement in disease	Defects in GAD1 are the cause of cerebral palsy spastic quadriplegic type 1 (CPSQ1) [MIM:603513]. A non-progressive disorder of movement and/or posture resulting from defects in the developing central nervous system. Affected individuals manifest symmetrical, non-progressive spasticity and no adverse perinatal history or obvious underlying alternative diagnosis. Developmental delay, mental retardation and sometimes epilepsy can be part of the clinical picture.
Sequence similarities	Belongs to the group II decarboxylase family.

Images

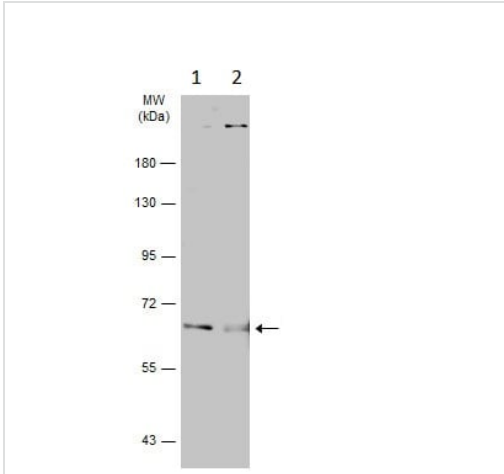


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GAD1 antibody (ab228710)

Paraffin-embedded adult mouse retina stained for GAD1 protein (green) using ab228710 at 1/250 dilution in immunohistochemical analysis.

Beta Tubulin 3/TUJ1 (red) stained by beta Tubulin 3/TUJ1 antibody diluted at 1/250.

Nuclear counterstain: Fluoroshield with DAPI (blue).



Western blot - Anti-GAD1 antibody (ab228710)

All lanes : Anti-GAD1 antibody (ab228710) at 1/500 dilution

Lane 1 : Mouse brain whole tissue extract

Lane 2 : Rat brain whole tissue extract

Lysates/proteins at 50 µg per lane.

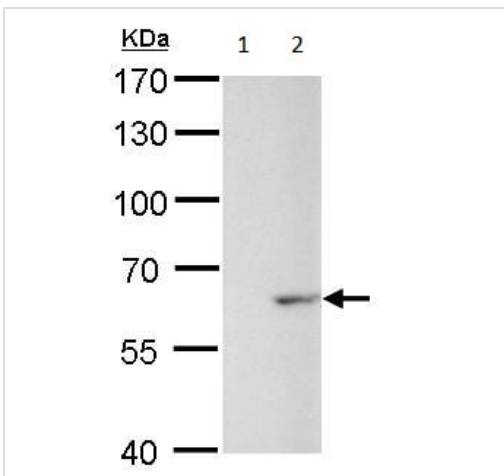
Secondary

All lanes : HRP-conjugated anti-rabbit IgG antibody

Developed using the ECL technique.

Predicted band size: 67 kDa

7.5% SDS-PAGE gel.



Western blot - Anti-GAD1 antibody (ab228710)

All lanes : Anti-GAD1 antibody (ab228710) at 1/1000 dilution

Lane 1 : HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate

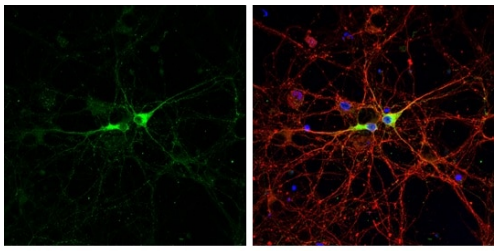
Lane 2 : GAD1-transfected HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate

Lysates/proteins at 30 µg per lane.

Developed using the ECL technique.

Predicted band size: 67 kDa

7.5% SDS-PAGE gel.



Immunocytochemistry/ Immunofluorescence - Anti-GAD1 antibody (ab228710)

DIV9 rat E18 primary cortical neurons stained for GAD1 (green) using ab228710 at 1/500 dilution in ICC/IF. Neurons were fixed in 4% paraformaldehyde at RT for 15 minutes.

Nuclear counterstain: Fluoroshield with DAPI (blue).

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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