

Product datasheet

Anti-GAD1 antibody [GAD1/2563] ab237999

2 Images

Overview

Product name	Anti-GAD1 antibody [GAD1/2563]
Description	Mouse monoclonal [GAD1/2563] to GAD1
Host species	Mouse
Tested applications	Suitable for: IHC-P, Protein Array
Species reactivity	Reacts with: Human
Immunogen	Recombinant fragment within Human GAD1 aa 72-135. The exact sequence is proprietary. Database link: Q99259
Positive control	IHC-P: Human brain tissue.
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
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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	Preservative: 0.05% Sodium azide Constituents: PBS, 0.05% BSA
Purity	Protein A/G purified
Purification notes	Purified from Bioreactor concentrate.
Clonality	Monoclonal
Clone number	GAD1/2563
Isotype	IgG2b
Light chain type	kappa

Applications

Our [Abpromise guarantee](#) covers the use of **ab237999** in the following tested applications.

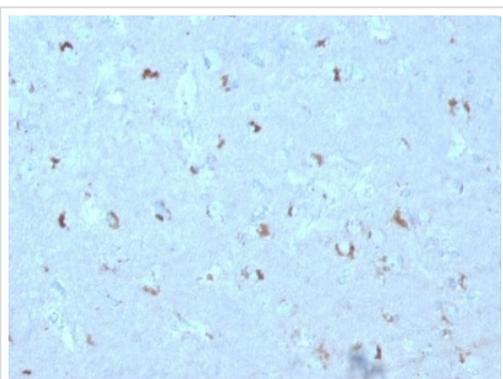
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		Use a concentration of 1 - 2 µg/ml. Primary incubation for 30 minutes at room temperature. Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Citrate Buffer, pH 6.0, for 10-20 minutes followed by cooling at RT for 20 minutes.
Protein Array		Use at an assay dependent concentration.

Target

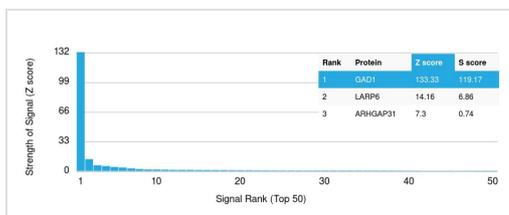
Function	Catalyzes the production of GABA.
Tissue specificity	Isoform 3 is expressed in pancreatic islets, testis, adrenal cortex, and perhaps other endocrine tissues, but not in brain.
Involvement in disease	Defects in GAD1 are the cause of cerebral palsy spastic quadriplegic type 1 (CPSQ1) [MIM:603513]. 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 [GAD1/2563] (ab237999)

Formalin-fixed, paraffin-embedded human brain tissue stained for GAD1 using ab237999 at 2 µg/mL in immunohistochemical analysis.



Protein Array - Anti-GAD1 antibody (ab237999)

ab237999 was tested in protein array against over 19000 different full-length human proteins.

Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target.

A MAb is specific to its intended target if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.

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

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