

Datasheet: AHP360

Description:	RABBIT ANTI GLUTAMATE DECARBOXYLASE 1/2
Specificity:	GLUTAMATE DECARBOXYLASE 1/2 65/67kDa
Other names:	GAD1, GAD2
Format:	Purified
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	0.1 ml

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen	▪			1/200 - 1/5000
Immunohistology - Paraffin	▪			
ELISA	▪			
Immunoprecipitation			▪	
Western Blotting	▪			1/1000 - 1/10000
Immunofluorescence	▪			

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

Target Species	Rat
Species Cross Reactivity	Reacts with: Cat, Human, Mouse N.B. Antibody reactivity and working conditions may vary between species.
Product Form	Purified IgG - liquid
Antiserum Preparation	Antiserum to glutamic acid decarboxylase was raised by repeated immunisation of with highly purified antigen. Purified IgG was prepared from whole serum by affinity chromatography on protein A.
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Immunogen	Synthetic peptide sequence D-F-L-I-E-E-I-E-R-L-G-Q-D-L from the C terminus of rat GAD2

**External Database
Links**

UniProt:

[Q05683](#) [Related reagents](#)

Entrez Gene:

[24380](#) Gad2 [Related reagents](#)

Synonyms

Gad65

Specificity

Rabbit anti Glutamate Decarboxylase 1/2 antibody recognizes both molecular forms of glutamate decarboxylase, GAD1 (GAD67) and GAD2 (GAD65), the enzyme which converts glutamic acid to gamma -aminobutyric acid (GABA), the major inhibitory transmitter in the higher brain region.

**Histology Positive
Control Tissue**

Brain

Western Blotting

A doublet at approximately 65/67 kDa can be expected

References

1. Hernandez-Montiel, H.L. *et al.* (2003) Diffusible signals and fasciculated growth in reticulospinal axon pathfinding in the hindbrain. [Dev. Biol. 255: 99-112.](#)
2. Baizer, J.S. *et al.* (2011) Neurochemical and structural organization of the principal nucleus of the inferior olive in the human. [Anat Rec \(Hoboken\). 294: 1198-216.](#)
3. Klusa, V. *et al.* (2013) Mildronate enhances learning/memory and changes hippocampal protein expression in trained rats. [Pharmacol Biochem Behav. pii: S0091-3057\(13\)00078-6.](#)
4. Wang, X. *et al.* (2008) A novel expression platform for the production of diabetes-associated autoantigen human glutamic acid decarboxylase (hGAD65). [BMC Biotechnol. 8:87](#)
5. Baizer, J.S. (2014) Unique features of the human brainstem and cerebellum. [Front Hum Neurosci. 8: 202.](#)

Storage

Store at +4°C or at -20°C if preferred.
Storage in frost-free freezers is not recommended.
This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life

18 months from date of despatch.

**Health And Safety
Information**

Material Safety Datasheet documentation #10040 available at:
10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

- Sheep Anti Rabbit IgG (STAR34...) [FITC](#)
Sheep Anti Rabbit IgG (STAR35...) [RPE](#)
Goat Anti Rabbit IgG (H/L) (STAR124...) [HRP](#)
Goat Anti Rabbit IgG (Fc) (STAR121...) [Biotin](#), [FITC](#), [HRP](#)
Sheep Anti Rabbit IgG (2AB02...) [Biotin](#)

Sheep Anti Rabbit IgG (STAR36...) [DyLight®488](#), [DyLight®549](#), [DyLight®649](#),
[DyLight®680](#), [DyLight®800](#)

Recommended Useful Reagents

[ANTIGEN RETRIEVAL BUFFER, pH8.0 \(BUF025A\)](#)

[ANTIGEN RETRIEVAL BUFFER, pH8.0 \(BUF025C\)](#)

[TidyBlot™ WESTERN BLOT DETECTION REAGENT:HRP \(STAR209P\)](#)

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