

Datasheet: AHP360

**BATCH NUMBER 148407**

<b>Description:</b>	RABBIT ANTI GLUTAMATE DECARBOXYLASE 1/2
<b>Specificity:</b>	GLUTAMATE DECARBOXYLASE 1/2 65/67kDa
<b>Other names:</b>	GAD1, GAD2
<b>Format:</b>	Purified
<b>Product Type:</b>	Polyclonal Antibody
<b>Isotype:</b>	Polyclonal IgG
<b>Quantity:</b>	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](http://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.

<b>Target Species</b>	Rat
<b>Species Cross Reactivity</b>	<p>Reacts with: Cat, Human, Mouse</p> <p><b>N.B.</b> Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.</p>
<b>Product Form</b>	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.

---

<b>Buffer Solution</b>	Phosphate buffered saline
------------------------	---------------------------

---

<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> )
---------------------------------	--

---

<b>Immunogen</b>	Synthetic peptide sequence D-F-L-I-E-E-I-E-R-L-G-Q-D-L from the C terminus of rat GAD2
------------------	--

---

<b>External Database Links</b>	<b>UniProt:</b> <a href="#">Q05683</a> <a href="#">Related reagents</a>  <b>Entrez Gene:</b> <a href="#">24380</a> Gad2 <a href="#">Related reagents</a>
--------------------------------	--

---

<b>Synonyms</b>	Gad65
-----------------	-------

---

<b>RRID</b>	AB_322069
-------------	-----------

---

<b>Specificity</b>	<b>Rabbit anti Glutamate Decarboxylase 1/2 antibody</b> 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.
--------------------	---

---

<b>Histology Positive Control Tissue</b>	Brain
--	-------

---

<b>Western Blotting</b>	A doublet at approximately 65/67 kDa can be expected
-------------------------	--

---

<b>References</b>	<ol style="list-style-type: none"><li>1. Hernández-montiel, H.L. <i>et al.</i> (2003) Diffusible signals and fasciculated growth in reticulospinal axon pathfinding in the hindbrain. <a href="#">Dev Biol. 255 (1): 99-112.</a></li><li>2. Baizer, J.S. <i>et al.</i> (2011) Neurochemical and structural organization of the principal nucleus of the inferior olive in the human. <a href="#">Anat Rec (Hoboken). 294: 1198-216.</a></li><li>3. Klusa, V. <i>et al.</i> (2013) Mildronate enhances learning/memory and changes hippocampal protein expression in trained rats. <a href="#">Pharmacol Biochem Behav. pii: S0091-3057(13)00078-6.</a></li><li>4. Wang, X. <i>et al.</i> (2008) A novel expression platform for the production of diabetes-associated autoantigen human glutamic acid decarboxylase (hGAD65). <a href="#">BMC Biotechnol. 8:87</a></li><li>5. Baizer, J.S. (2014) Unique features of the human brainstem and cerebellum. <a href="#">Front Hum Neurosci. 8: 202.</a></li><li>6. Solís-S, J.C. <i>et al.</i> (2018) Signals from the caudal diencephalon are required for the projection of the Interstitial Nuclei of Cajal. <a href="#">Int J Dev Neurosci. 69: 10-6.</a></li></ol>
-------------------	--

---

<b>Storage</b>	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.

---

<b>Guarantee</b>	12 months from date of despatch
------------------	---------------------------------

---

<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/AHP360">https://www.bio-rad-antibodies.com/SDS/AHP360</a> 10040
--------------------------------------	--

---

<b>Regulatory</b>	For research purposes only
-------------------	----------------------------

---

## Related Products

### Recommended Secondary Antibodies

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

### Recommended Useful Reagents

[ANTIGEN RETRIEVAL BUFFER, pH8.0 \(BUF025A\)](#)  
[TidyBlot WESTERN BLOT DETECTION REAGENT:HRP \(STAR209P\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
----------------------------------	---	------------------	---	---------------	---

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://bio-rad-antibodies.com/datasheets)  
'M364191:200529'

Printed on 18 Sep 2023

---

© 2023 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)