

## **Product datasheet**

# Anti-GABA A Receptor alpha 1 antibody [EPR5401(2)] -BSA and Azide free ab236057

Recombinant RabMAb

8 Images

Overview	
Product name	Anti-GABA A Receptor alpha 1 antibody [EPR5401(2)] - BSA and Azide free
Description	Rabbit monoclonal [EPR5401(2)] to GABA A Receptor alpha 1 - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: IHC-P, WB
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	IHC-P: Human brain tissue.
General notes	ab236057 is the carrier-free version of <u>ab151573</u> .
	Our <b>carrier-free</b> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.
	This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.
	Use our <b>conjugation kits</b> for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.
	This product is compatible with the Maxpar <sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar <sup>®</sup> is a trademark of Fluidigm Canada Inc.
	<ul> <li>This product is a recombinant monoclonal antibody, which offers several advantages including:</li> <li>High batch-to-batch consistency and reproducibility</li> <li>Improved sensitivity and specificity</li> <li>Long-term security of supply</li> <li>Animal-free production</li> <li>For more information <u>see here</u>.</li> <li>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <u>RabMAb<sup>®</sup> patents</u>.</li> </ul>
	Mouse, Kat: we have preliminary internal testing data to indicate this antibody may not react with

Pro	perties
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Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR5401(2)
Isotype	lgG

### Applications

The Abpromise guarantee Our <u>Abpromise guarantee</u> covers the use of ab236057 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 at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
WB		Use at an assay dependent concentration. Predicted molecular weight: 52 kDa.

Target	
Function	GABA, the major inhibitory neurotransmitter in the vertebrate brain, mediates neuronal inhibition by binding to the GABA/benzodiazepine receptor and opening an integral chloride channel.
Involvement in disease	Defects in GABRA1 are the cause of childhood absence epilepsy type 4 (ECA4) [MIM:611136]. A subtype of idiopathic generalized epilepsy characterized by onset at age 6-7 years, frequent absence seizures (several per day) and bilateral, synchronous, symmetric 3-Hz spike waves on EEG. During adolescence, tonic-clonic and myoclonic seizures may develop. Absence seizures may either remit or persist into adulthood. Defects in GABRA1 are the cause of juvenile myoclonic epilepsy type 5 (EJM5) [MIM:611136]. A subtype of idiopathic generalized epilepsy. Patients have afebrile seizures only, with onset in adolescence (rather than in childhood) and myoclonic jerks which usually occur after awakening and are triggered by sleep deprivation and fatigue.
Sequence similarities	Belongs to the ligand-gated ion channel (TC 1.A.9) family. Gamma-aminobutyric acid receptor (TC 1.A.9.5) subfamily. GABRA1 sub-subfamily.
Cellular localization	Cell junction > synapse > postsynaptic cell membrane. Cell membrane.

#### Images



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-GABA A Receptor alpha 1 antibody [EPR5401(2)] - BSA and Azide free (ab236057) Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human cerebrum tissue sections labeling GABA A Receptor alpha 1 with Purified <u>ab151573</u> at 1:1000 dilution (0.7 µg/ml). Heat mediated antigen retrieval was performed using <u>ab93684</u> (Tris/EDTA buffer, pH 9.0)ImmunoHistoProbe one step HRP Polymer (ready to use)was used as the secondary antibody.Negative control:PBS instead of the primary antibody.Hematoxylinwas used as a counterstain This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab151573</u>).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-GABA A Receptor alpha 1 antibody [EPR5401(2)] - BSA and Azide free (ab236057) Immunohistochemical analysis of paraffin-embedded Human glioma tissue labeling GABA A Receptor alpha 1 with unpurified <u>ab151573</u> at 1/50 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab151573</u>).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-GABA A Receptor alpha 1 antibody [EPR5401(2)] - BSA and Azide free (ab236057)

Immunohistochemical analysis of paraffin embedded normal Human colon tissue using unpurified <u>ab151573</u> showing -ve staining.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab151573</u>).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-GABA A Receptor alpha 1 antibody [EPR5401(2)] - BSA and Azide free (ab236057) Immunohistochemical analysis of paraffin embedded normal Human kidney tissue using unpurified <u>ab151573</u> showing -ve staining.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab151573</u>).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-GABA A Receptor alpha 1 antibody [EPR5401(2)] - BSA and Azide free (ab236057) Immunohistochemical analysis of paraffin embedded Human Ovarian carcinoma tissue using unpurified <u>ab151573</u> showing -ve staining.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab151573</u>).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-GABA A Receptor alpha 1 antibody [EPR5401(2)] - BSA and Azide free (ab236057)



This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab151573</u>).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-GABA A Receptor alpha 1 antibody [EPR5401(2)] - BSA and Azide free (ab236057)



Anti-GABA A Receptor alpha 1 antibody [EPR5401(2)] - BSA and Azide free (ab236057) Immunohistochemical analysis of paraffin-embedded human brain tissue labeling GABA A Receptor alpha 1 with <u>ab151573</u> at 1/50 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab151573</u>).

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