

Product datasheet

Anti-beta 2 Adrenergic Receptor antibody [EPR707(N)] - BSA and Azide free ab213651

Recombinant RabMAb

5 Images

Overview

Product name	Anti-beta 2 Adrenergic Receptor antibody [EPR707(N)] - BSA and Azide free
Description	Rabbit monoclonal [EPR707(N)] to beta 2 Adrenergic Receptor - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: IHC-Fr, IHC-P, WB Unsuitable for: Flow Cyt or ICC/IF
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide (the amino acid sequence is considered to be commercially sensitive) within Human beta 2 Adrenergic Receptor aa 350 to the C-terminus. The exact sequence is proprietary. Database link: P07550
Positive control	WB: Human fetal liver, Human skeletal muscle, Mouse heart, Rat heart, Mouse kidney, Rat kidney, and A431 lysates; IHC-P: Rat stomach, Human stomach and Mouse cerebrum tissues; IHC-Fr: Mouse stomach tissue section.
General notes	<p>ab213651 is the carrier-free version of ab182136. This format is designed for use in antibody labeling, including fluorochromes, metal isotopes, oligonucleotides, enzymes.</p> <p>Our carrier-free formats are supplied in a buffer free of BSA, sodium azide and glycerol for higher conjugation efficiency.</p> <p>Use our conjugation kits 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.</p> <p>ab213651 is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm.</p> <p><i>Maxpar[®] is a trademark of Fluidigm Canada Inc.</i></p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

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.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

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.

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.

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.

Properties

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	EPR707(N)
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab213651** 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-Fr		Use at an assay dependent concentration. Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).
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.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Detects a band of approximately 68 kDa (predicted molecular weight: 46 kDa).

Application notes Is unsuitable for Flow Cyt or ICC/IF.

Target

Function Beta-adrenergic receptors mediate the catecholamine-induced activation of adenylate cyclase through the action of G proteins. The beta-2-adrenergic receptor binds epinephrine with an approximately 30-fold greater affinity than it does norepinephrine.

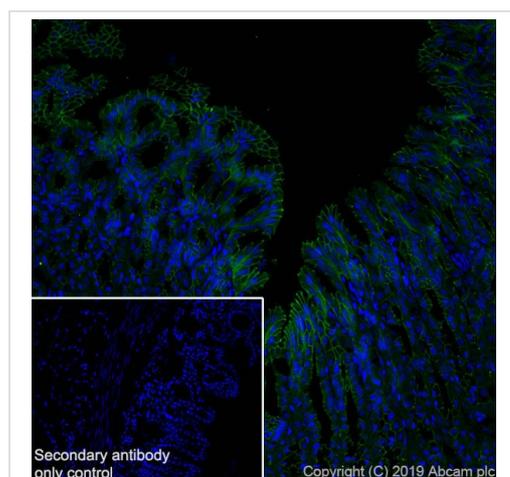
Sequence similarities Belongs to the G-protein coupled receptor 1 family. Adrenergic receptor subfamily. ADRB2 sub-subfamily.

Post-translational modifications Palmitoylated; may reduce accessibility of Ser-345 and Ser-346 by anchoring Cys-341 to the plasma membrane. Agonist stimulation promotes depalmitoylation and further allows Ser-345 and Ser-346 phosphorylation.

Phosphorylated by PKA and BARK upon agonist stimulation, which mediates homologous desensitization of the receptor. PKA-mediated phosphorylation seems to facilitate phosphorylation by BARK. Phosphorylated upon DNA damage, probably by ATM or ATR. Phosphorylation of Tyr-141 is induced by insulin and leads to supersensitization of the receptor. Ubiquitinated. Agonist-induced ubiquitination leads to sort internalized receptors to the lysosomes for degradation. Deubiquitination by USP20 and USP33, leads to ADRB2 recycling and resensitization after prolonged agonist stimulation. USP20 and USP33 are constitutively associated and are dissociated immediately after agonist stimulation.

Cellular localization Cell membrane.

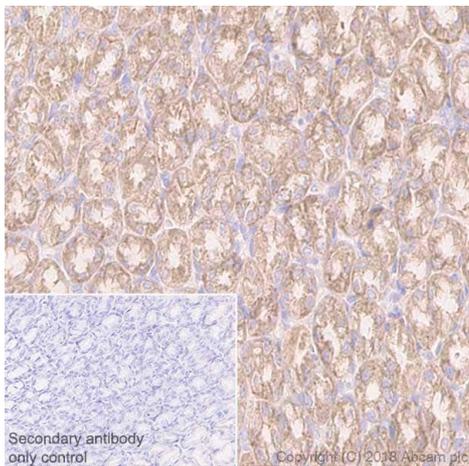
Images



Immunohistochemistry (Frozen sections) analysis of mouse stomach tissue sections labeling beta 2 Adrenergic Receptor with Purified [ab182136](#) at 1/100 (1.3 µg/ml). Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20). Goat anti rabbit IgG (Alexa Fluor® 488, [ab150077](#)) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. DAPI was 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 ([ab182136](#)).

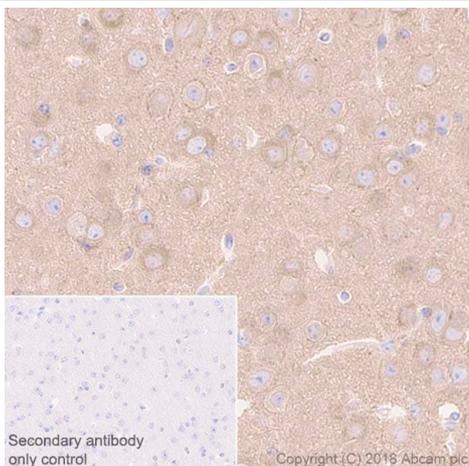
Immunohistochemistry (Frozen sections) - Anti-beta 2 Adrenergic Receptor antibody [EPR707(N)] - BSA and Azide free ([ab213651](#))



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta 2 Adrenergic Receptor antibody [EPR707(N)] - BSA and Azide free (ab213651)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Rat stomach tissue sections labeling beta 2 Adrenergic Receptor with Purified [ab182136](#) at 1:100 dilution (1.28 µg/ml). Heat mediated antigen retrieval was performed using [ab93684](#) (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. Hematoxylin was used as a counterstain.

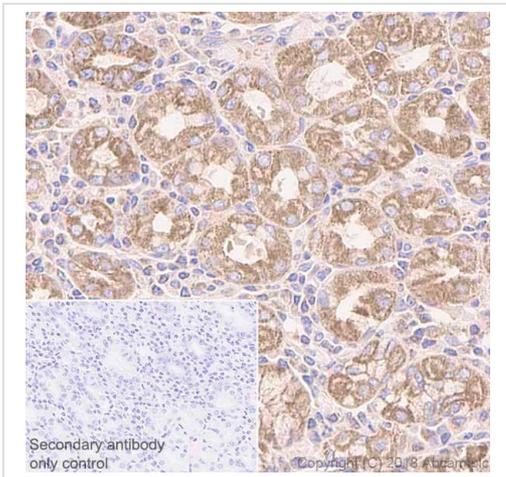
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab182136](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta 2 Adrenergic Receptor antibody [EPR707(N)] - BSA and Azide free (ab213651)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Mouse cerebrum tissue sections labeling beta 2 Adrenergic Receptor with Purified [ab182136](#) at 1:100 dilution (1.28 µg/ml). Heat mediated antigen retrieval was performed using [ab93684](#) (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. Hematoxylin was 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 ([ab182136](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human stomach tissue sections labeling beta 2 Adrenergic Receptor with Purified [ab182136](#) at 1:100 dilution (1.28 µg/ml). Heat mediated antigen retrieval was performed using [ab93684](#) (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. Hematoxylin was 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 ([ab182136](#)).

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta 2 Adrenergic Receptor antibody [EPR707(N)] - BSA and Azide free (ab213651)

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-beta 2 Adrenergic Receptor antibody [EPR707(N)] - BSA and Azide free (ab213651)

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

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