

Product datasheet

Anti-beta 2 Adrenergic Receptor antibody [6H8]
ab125150

1 Image

Overview

Product name	Anti-beta 2 Adrenergic Receptor antibody [6H8]
Description	Mouse monoclonal [6H8] to beta 2 Adrenergic Receptor
Host species	Mouse
Tested applications	Suitable for: Functional Studies, Flow Cyt, ELISA
Species reactivity	Reacts with: Rat, Guinea pig, Human
Immunogen	Human beta 2 Adrenergic Receptor (second extracellular loop).
Positive control	A431 cells.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	Constituents: 99% PBS, 0.1% BSA
Purity	Protein G purified
Clonality	Monoclonal
Clone number	6H8
Isotype	IgG1

Applications

Our [Abpromise guarantee](#) covers the use of **ab125150** 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
Functional Studies		Use at an assay dependent concentration.

Application	Abreviews	Notes
Flow Cyt		Use 0.1-1µg for 10 ⁶ cells. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
ELISA		Use at an assay dependent concentration.

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

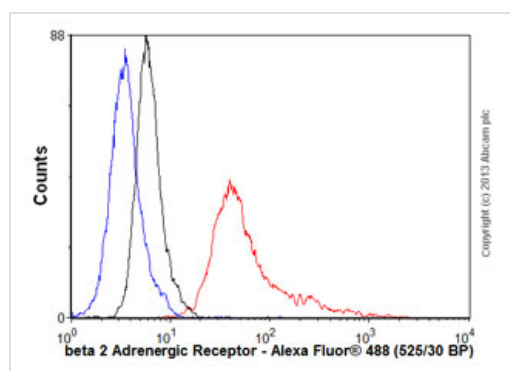
Palmitoylated; may reduce accessibility of Ser-345 and Ser-346 by anchoring Cys-341 to the plasma membrane. Agonist stimulation promotes depalmitoylation and further allows Ser-345 and Ser-346 phosphorylation.

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



Flow Cytometry - Anti-beta 2 Adrenergic Receptor antibody [6H8] (ab125150)

Overlay histogram showing SHSY-5Y cells stained with ab125150 (red line). The cells were fixed with 80% methanol (5 min) and incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab125150, 0.1µg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-mouse IgG (H&L) ([ab150113](#)) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] ([ab91353](#), 1µg/1x10⁶ cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter. This antibody gave a positive result in 4% paraformaldehyde (10 min) fixed

SHSY-5Y cells used under the same conditions. Please note that Abcam do not have any data for use of this antibody on non-fixed cells. We welcome any customer feedback.

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours

- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors