abcam

Product datasheet

Anti-ErbB 2 antibody [CB2D7] (Phycoerythrin) ab106676

1 Image

Overview

Product name	Anti-ErbB 2 antibody [CB2D7] (Phycoerythrin)
Description	Mouse monoclonal [CB2D7] to ErbB 2 (Phycoerythrin)
Host species	Mouse
Conjugation	Phycoerythrin. Ex: 488nm, Em: 575nm
Tested applications	**Suitable for:** Flow Cyt
Species reactivity	**Reacts with:** Human, Monkey
Immunogen	The details of the immunogen for this antibody are not available.
Positive control	HER2+ cells

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C.
Storage buffer	Preservative: 0.1% Sodium Azide Constituents: 0.5% BSA, PBS, pH 7.4
Purity	Size exclusion
Clonality	Monoclonal
Clone number	CB2D7
Isotype	IgG

Applications

Our Abpromise guarantee covers the use of **ab106676** in the following tested applications.

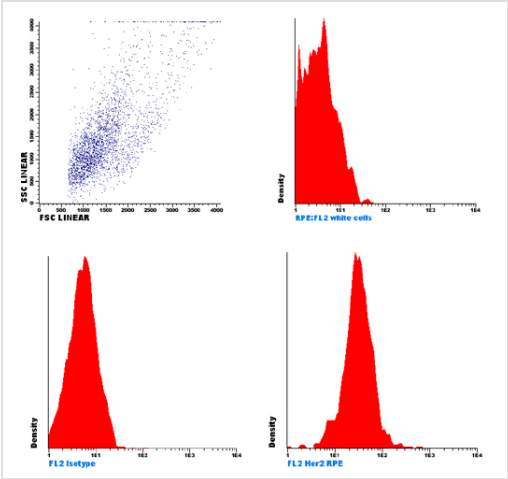
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt		Use 10µl for 10^6 cells. (leucotyes) in 100 µl of whole blood. ab37392 - Mouse monoclonal IgG, is suitable for use as an isotype control with this antibody.

Target

Function	Protein tyrosine kinase that is part of several cell surface receptor complexes, but that apparently needs a coreceptor for ligand binding. Essential component of a neuregulin-receptor complex, although neuregulins do not interact with it alone. GP30 is a potential ligand for this receptor. Regulates outgrowth and stabilization of peripheral microtubules (MTs). Upon ERBB2 activation, the MEMO1-RHOA-DIAPH1 signaling pathway elicits the phosphorylation and thus the inhibition of GSK3B at cell membrane. This prevents the phosphorylation of APC and CLASP2, allowing its association with the cell membrane. In turn, membrane-bound APC allows the localization of MACF1 to the cell membrane, which is required for microtubule capture and stabilization. In the nucleus is involved in transcriptional regulation. Associates with the 5'-TCAAATTC-3' sequence in the PTGS2/COX-2 promoter and activates its transcription. Implicated in transcriptional activation of CDKN1A; the function involves STAT3 and SRC. Involved in the transcription of rRNA genes by RNA Pol I and enhances protein synthesis and cell growth.
Tissue specificity	Expressed in a variety of tumor tissues including primary breast tumors and tumors from small bowel, esophagus, kidney and mouth.
Involvement in disease	Hereditary diffuse gastric cancer Glioma Ovarian cancer Lung cancer Gastric cancer Chromosomal aberrations involving ERBB2 may be a cause gastric cancer. Deletions within 17q12 region producing fusion transcripts with CDK12, leading to CDK12-ERBB2 fusion leading to truncated CDK12 protein not in-frame with ERBB2.
Sequence similarities	Belongs to the protein kinase superfamily. Tyr protein kinase family. EGF receptor subfamily. Contains 1 protein kinase domain.
Post-translational modifications	Autophosphorylated. Autophosphorylation occurs in trans, i.e. one subunit of the dimeric receptor phosphorylates tyrosine residues on the other subunit (Probable). Ligand-binding increases phosphorylation on tyrosine residues (PubMed:27134172). Signaling via SEMA4C promotes phosphorylation at Tyr-1248 (PubMed:17554007). Dephosphorylated by PTPN12 (PubMed:27134172).
Cellular localization	Cytoplasm. Nucleus and Cell membrane. Cytoplasm, perinuclear region. Nucleus. Translocation to the nucleus requires endocytosis, probably endosomal sorting and is mediated by importin beta-1/KPNB1.

Images



Flow Cytometry - Anti-ErbB 2 antibody [CB2D7] (Phycoerythrin) (ab106676)

ab106676 staining ErbB 2 in the Human mammary gland adenocarcinoma cell line by Flow Cytometry. The cells were then incubated with the antibody (ab106676, 10 ul for 3-5x106 cells) for 30 minutes in the dark at room temperature. The isotype control antibody (bottom left panel) was used under the same conditions and was IgG1. The negative control (top right panel) was unstained Human mammary gland adenocarcinoma cells.

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 http://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