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Product datasheet

Anti-ErbB2 / HER2 (phospho Y1248) antibody ab101229

★★★★★ 1 Abreviews 1 References 4 图像

概述

产品名称 Anti-ErbB2 / HER2 (phospho Y1248)抗体

描述 兔多克隆抗体to ErbB2 / HER2 (phospho Y1248)

宿主 Rabbit

经测试应用 适用于: WB, ELISA, IHC-P

种属反应性 与反应: Human

预测可用于: Rat 🕰

免疫原 Synthetic peptide corresponding to Human ErbB2/ HER2 aa 1200 to the C-terminus (phospho

Y1248) conjugated to keyhole limpet haemocyanin.

(Peptide available as ab139514)

阳性对照 This antibody gave a positive signal in EGF-treated A431 whole cell lysate. IHC-P: FFPE human

breast adenocarcinoma tissue sections.

常规说明

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. 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, along with publications, customer reviews and Q&As

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

存储溶液 pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising

agent. If you would like information about the formulation of a specific lot, please contact our

scientific support team who will be happy to help.

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纯**度** Immunogen affinity purified

克隆 多克隆

同种型 lgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab101229于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB	★★★★☆ (1)	Use a concentration of 1 µg/ml. Detects a band of approximately 180 kDa (predicted molecular weight: 138 kDa).
ELISA		Use at an assay dependent concentration.
IHC-P		Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

靶标

功能

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.

组织特异性

Expressed in a variety of tumor tissues including primary breast tumors and tumors from small bowel, esophagus, kidney and mouth.

疾病相关

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.

序列相似性

 $\label{thm:continuous} \textbf{Belongs to the protein kinase superfamily. Tyr protein kinase family. EGF receptor subfamily.}$

Contains 1 protein kinase domain.

翻译后修饰

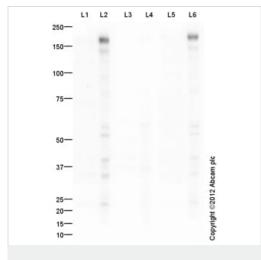
Autophosphorylated. Autophosphorylation occurs in trans, i.e. one subunit of the dimeric receptor phosphorylates tyrosine residues on the other subunit (Probable). Ligand-binding increases

phosphorylation on tyrosine residues (PubMed:27134172). Signaling via SEMA4C promotes phosphorylation at Tyr-1248 (PubMed:17554007). Dephosphorylated by PTPN12 (PubMed:27134172).

细胞定位

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.

图片



Western blot - Anti-ErbB2 / HER2 (phospho Y1248) antibody (ab101229)

All lanes : Anti-ErbB2 / HER2 (phospho Y1248) antibody (ab101229) at 1 μg/ml

Lane 1: A431 (Human epithelial carcinoma cell line) Whole Cell Lysate

Lane 2: EGF-Stimulated A431 Whole Cell Lysate

Lane 3: A431 (Human epithelial carcinoma cell line) Whole Cell Lysate with Immunizing peptide at 1 μg/ml

Lane 4: EGF-Stimulated A431 Whole Cell Lysate with Immunizing

peptide at 1 µg/ml

Lane 5: A431 (Human epithelial carcinoma cell line) Whole Cell

Lysate with Non modified peptide at 1 $\mu g/ml$

Lane 6: EGF-Stimulated A431 Whole Cell Lysate with Non modified peptide at 1 µg/ml

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) preadsorbed (ab97080) at 1/5000 dilution

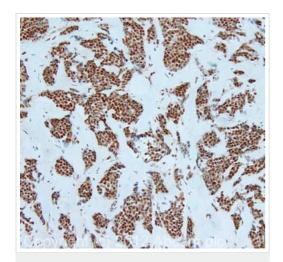
Developed using the ECL technique.

Performed under reducing conditions.

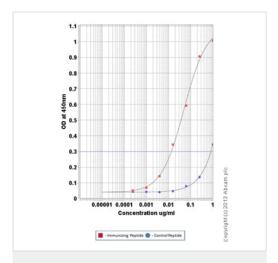
Predicted band size: 138 kDa

Exposure time: 3 minutes

ErbB2 / HER2 (phospho Y1248)contains a number of potential glycosylation sites (SwissProt) which may explain its migration at a higher molecular weight than predicted.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ErbB2 / HER2 (phospho Y1248) antibody (ab101229)

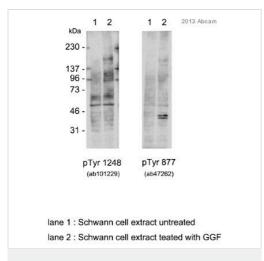


ELISA - Anti-ErbB2 / HER2 (phospho Y1248) antibody (ab101229)

IHC image of ab101229 staining in FFPE human breast adenocarcinoma formalin fixed paraffin embedded tissue section, performed on a Leica BondTM system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab101229, 1µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

ab101229 was tested using an Indirect ELISA approach. The wells were coated with peptide (1 μ g/ml at 100 μ l/well) overnight at 4°C, followed by a 5% BSA blocking step for 1 hour at room temperature. The primary Ab was then added at a dilution range of 1-0.00025 μ g/ml (100 μ l/well) for 1hr at room temperature. A HRP-conjugated anti-rabbit lgG (heavy and light chain) was used as a secondary antibody at 1:20,000 dilution for 1hr at room temperature.



Western blot - Anti-ErbB2 / HER2 (phospho Y1248) antibody (ab101229)

This image is courtesy of an anonymous Abreview

All lanes : Anti-ErbB2 / HER2 (phospho Y1248) antibody (ab101229) at 1/500 dilution

Lane 1: Schwann cell extract untreated

Lane 2: Schwann cell extract treated with 10 ng/ml GGF for 30 minutes.

Lysates/proteins at 10 µg per lane.

Secondary

All lanes: HRP conjugated goat anti-rabbit lgG at 1/10000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 138 kDa
Observed band size: 200 kDa

Exposure time: 1 minute

Lanes on the left hand side show phosphorylation of ErbB2 / HER2 at tyrosine 1248 (<u>ab101299</u>) in rat Schwann cells upon incubation with 10 ng/ml GGF for 30 minutes (lane 2).

Treatment with GGF also induces phosphorylation of ErbB2 at tyrosine 877, which is observed on the right hand side blots.

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