abcam

Product datasheet

Anti-ErbB2 / HER2 (phospho Y1139) antibody [EP1046Y] ab53290

יעלאעבע RabMAb

★★★★★ 1 Abreviews 14 References 画像数 6

製品の概要

製品名 Anti-ErbB2 / HER2 (phospho Y1139) antibody [EP1046Y]

製品の詳細 Rabbit monoclonal [EP1046Y] to ErbB2 / HER2 (phospho Y1139)

由来種 Rabbit

アプリケーション 適用あり: WB, IP, Dot blot

適用なし: ICC/IF,IHC-Fr or IHC-P

種交差性 交差種: Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール WB: SKBR3 and A431 cell lysates treated with EGF.

特記事項 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with

these species. Please contact us for more information.

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

バッファー

Preservative: 0.01% Sodium azide

Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture

supernatant

精製度 Protein A purified

ポリ/モノ モノクローナル **ウローン名** EP1046Y

アイソタイプ IgG

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab53290の使用に適用されますアプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB	**** (1)	1/500 - 1/1000. Detects a band of approximately 185 kDa (predicted molecular weight: 138 kDa).
IP		1/30.
Dot blot		1/1000.

追加情報 Is unsuitable for ICC/IF,IHC-Fr or IHC-P.

ターゲット情報

機能

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.

組織特異性

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

関連疾患

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.

配列類似性

Belongs to the protein kinase superfamily. Tyr protein kinase family. EGF receptor subfamily.

Contains 1 protein kinase domain.

翻訳後修飾

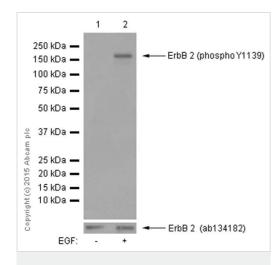
Autophosphorylated. Autophosphorylation occurs in trans, i.e. one subunit of the dimeric receptor phosphorylates tyrosine residues on the other subunit (Probable). Ligand-binding increases

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

細胞内局在

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.

画像



Western blot - Anti-ErbB2 / HER2 (phospho Y1139) antibody [EP1046Y] (ab53290)

All lanes: Anti-ErbB2 / HER2 (phospho Y1139) antibody [EP1046Y] (ab53290) at 1/500 dilution

Lane 1: A431 whole cell lysate - untreated

Lane 2: A431 whole cell lysate - treated with Epidermal Growth Factor (EGF)

Lysates/proteins at 10 µg per lane.

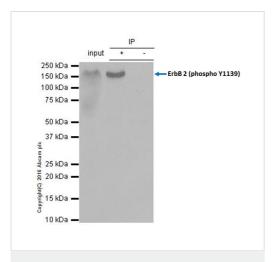
Secondary

All lanes : Peroxidase-conjugated goat anti-rabbit lgG (H+L) at 1/1000 dilution

Predicted band size: 138 kDa **Observed band size:** 185 kDa

Exposure time: 3 minutes

Blocking and dilution buffer: 5% NFDM/TBST.



Immunoprecipitation - Anti-ErbB2 / HER2 (phospho Y1139) antibody [EP1046Y] (ab53290)

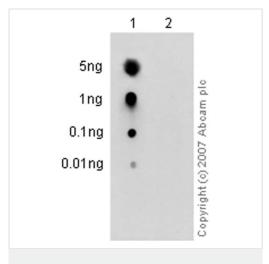
ab53290 at 1/70 dilution immunoprecipitating ErbB 2 (phospho Y1139) in A431 (human epidermoid carcinoma) whole cell lysate.

Lane 1 (input): A431 treated with 100 ng/mL EGF for 10 minutes whole cell lysate $10\mu g$

Lane 2 (+): ab53290 + A431 treated with 100 ng/mL EGF for 10 minutes whole cell lysate

Lane 3 (-): Rabbit monoclonal IgG (<u>ab172730</u>) instead of ab53290 in A431treated with 100 ng/mL EGF for 10 minutes whole cell lysate VeriBlot for IP Detection Reagent (HRP) (<u>ab131366</u>), was used for detection at 1/1000 dilution.

Blocking and Diluting buffer and concentration: 5% NFDM/TBST.

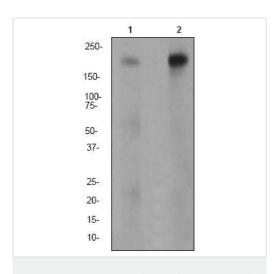


Dot Blot - Anti-ErbB2 / HER2 (phospho Y1139) antibody [EP1046Y] (ab53290)

Dot blot analysis of ErbB 2 (pY1139) peptide (Lane 1) and ErbB 2 non-phospho peptide (Lane 2) labelling ErbB 2 (phospho Y1139) with ab53290 at a dilution of 1/1000. A Peroxidase-conjugated goat anti-rabbit lgG (H+L) was used as the secondary antibody at a dilution of 1/2500.

Blocking and dilution buffer: 5% NFDM/TBST.

Exposure time: 3 minutes.



Western blot - Anti-ErbB2 / HER2 (phospho Y1139) antibody [EP1046Y] (ab53290)

All lanes : Anti-ErbB2 / HER2 (phospho Y1139) antibody [EP1046Y] (ab53290) at 1/1000 dilution

Lane 1: SKBR3 cell lysate

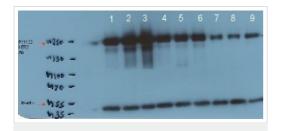
Lane 2: SKBR3 cell lysate - treated with EGF

Lysates/proteins at 10 µg per lane.

Secondary

All lanes: HRP-conjugated goat anti-rabbit lgG at 1/2000 dilution

Predicted band size: 138 kDa Observed band size: 185 kDa



Western blot - Anti-ErbB2 / HER2 (phospho Y1139) antibody [EP1046Y] (ab53290)

This image is courtesy of an Abreview by Surekha Pimple

All lanes: Anti-ErbB2 / HER2 (phospho Y1139) antibody [EP1046Y] (ab53290) at 1/2000 dilution

Lane 1 : HTB-2O Human breast ductal carcinoma lysate untreated **Lanes 2-9 :** HTB-2O Human breast ductal carcinoma lysate treated with HER-2 inhibitor

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : HRP-conjugated Mouse anti-Rabbit monoclonal at 1/20000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 138 kDa

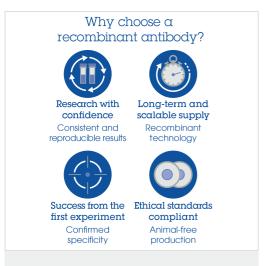
Exposure time: 5 seconds

Lanes 2-9 are treated with an increasing concentration of HER2 inhibitor.

Blocking performed with 5% Milk for 1 hour at room temperature.

Antibody diluted in CPPT and incubated for 16 hours at 4°C.

Performed under denaturing conditions.



Anti-ErbB2 / HER2 (phospho Y1139) antibody [EP1046Y] (ab53290)

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