# abcam

## Product datasheet

## Anti-ErbB2 / HER2 (phospho Y877) antibody [EPR2324Y] ab75873



重组 RabMAb

## 1 References 6 图像

#### 概述

产品名称 Anti-ErbB2 / HER2 (phospho Y877)抗体[EPR2324Y]

描述 兔单克隆抗体[EPR2324Y] to ErbB2 / HER2 (phospho Y877)

宿主 Rabbit

经测试应用 适用于: Dot blot, WB, ICC/IF, Flow Cyt (Intra)

不适用于: IHC-P or IP

种属反应性 与反应: Human

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

阳性对照 HeLa and SKBR3 cell lysates treated with EGF. SKBR3 cells.

常规说明 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

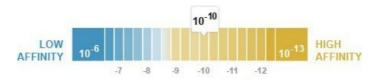
these species. Please contact us for more information.

## 性能

形式 Liquid

存放说明 Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

 $K_D = 8.30 \times 10^{-10} M$ 解离常数(KD)



#### Learn more about K<sub>D</sub>

**存储溶液** pH: 7.20

Preservative: 0.05% Sodium azide

Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue

culture supernatant

纯**度** Protein A purified

**克隆** 单克隆

**克隆编号** EPR2324Y

**同种型** IgG

#### 应用

## The Abpromise quarantee Abpromise™承诺保证使用ab75873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
Dot blot		1/1000.
WB		1/500 - 1/1000. Detects a band of approximately 180 kDa (predicted molecular weight: 138 kDa).
ICC/IF		1/50 - 1/100.
Flow Cyt (Intra)		Use at an assay dependent concentration.

应用说明 Is unsuitable for IHC-P or IP.

#### 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 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

 $phosphory lation\ at\ Tyr-1248\ (PubMed: 17554007).\ Dephosphory lated\ by\ PTPN12$ 

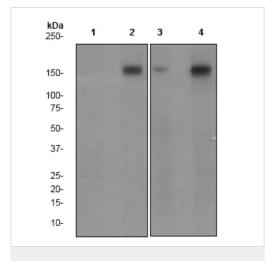
(PubMed:27134172).

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 Y877) antibody [EPR2324Y] (ab75873)

**All lanes :** Anti-ErbB2 / HER2 (phospho Y877) antibody [EPR2324Y] (ab75873) at 1/1000 dilution

Lane 1: HeLa cell lysate, untreated

Lane 2: HeLa cell lysate, treated with EGF

Lane 3: SKBR-3 cell lysate, untreated

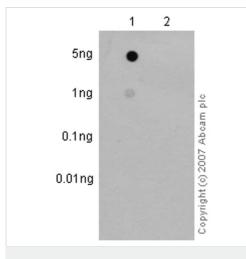
Lane 4: SKBR-3 cell lysate, treated with EGF

Lysates/proteins at 10 µg per lane.

#### Secondary

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

Predicted band size: 138 kDa
Observed band size: 180 kDa

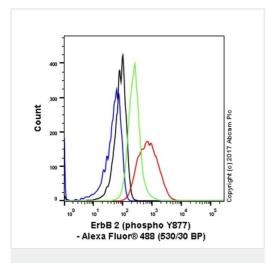


Dot Blot - Anti-ErbB2 / HER2 (phospho Y877) antibody [EPR2324Y] (ab75873)

Dot blot analysis of ErbB 2 (pY877) peptide (Lane 1) and ErbB 2 non-phospho peptide (Lane 2) labelling ErbB 2 (phospho Y877) with ab75873 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.

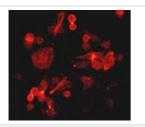
Blocking and dilution buffer: 5% NFDM/TBST.

Exposure time: 3 minutes.



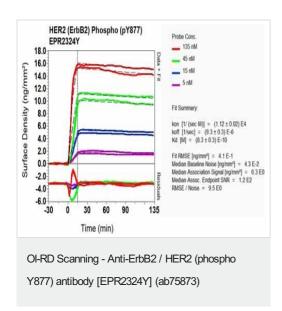
Flow Cytometry (Intracellular) - Anti-ErbB2 / HER2 (phospho Y877) antibody [EPR2324Y] (ab75873)

Intracellular Flow Cytometry analysis of A431 (human epidermoid carcinoma) untreated/treated with 200 ng/ml EGF for 15 minutes labeling ErbB 2 with unpurified ab75873 at 1/20 (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat Anti-Rabbit IgG H&L (Alexa Fluorr® 488) (ab150077) (1/2000 dilution) was used as the secondary antibody. Rabbit IgG, monoclonal [EPR25A] - Isotype Control (ab172730) (Black) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) were used as the unlabeled control.



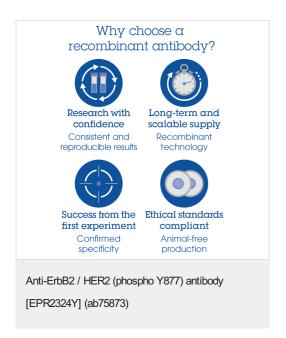
Immunocytochemistry/ Immunofluorescence - Anti-ErbB2 / HER2 (phospho Y877) antibody [EPR2324Y] (ab75873)

ab75873 at 1/50 dilution staining ErbB 2 in SKBR3 cells by Immunofluorescence.



Equilibrium disassociation constant ( $K_D$ ) Learn more about  $K_D$ 

Click here to learn more about K<sub>D</sub>



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