# abcam

### Product datasheet

## Anti-ErbB2 / HER2 (phospho Y877) antibody [EP2324Y] ab108371

יעלאעבע RabMAb



★★★★★ 1 Abreviews 8 References

画像数7

#### 製品の概要

製品名 Anti-ErbB2 / HER2 (phospho Y877) antibody [EP2324Y]

製品の詳細 Rabbit monoclonal [EP2324Y] to ErbB2 / HER2 (phospho Y877)

由来種 Rabbit

アプリケーション 適用あり: WB, IHC-P, Dot blot, ICC/IF, Flow Cyt (Intra)

適用なし: №

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 HeLa cell lysate, SKBR-3 cell lysate, Human breast ductal infiltrating carcinoma tissue, SKBR-3

cells.

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

保存方法 Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

バッファー pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 0.31% Sodium citrate, 0.175% Sodium chloride, 0.0172% EDTA disodium salt,

59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

精製度 Protein A purified

**ポリ/モノ** モノクローナル

**クローン名** EP2324Y

アイソタイプ lgG

#### 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ab108371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	<b>★★☆☆☆ (1)</b>	1/500 - 1/1000. Predicted molecular weight: 138 kDa.
IHC-P		1/250 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Perform antigen retrieval before commencing with IHC staining protocol
Dot blot		1/1000.
ICC/IF		1/50 - 1/100.
Flow Cyt (Intra)		Use at an assay dependent concentration.

追加情報 Is unsuitable for IP.

#### 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.

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).

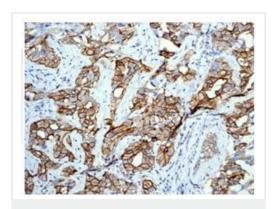
**細胞内局在** Cytoplasm. Nucleus and Cell membrane. Cytoplasm, perinuclear region. Nucleus. Translocation

to the nucleus requires endocytosis, probably endosomal sorting and is mediated by importin

beta-1/KPNB1.

#### 画像

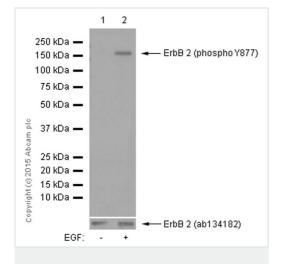
配列類似性



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ErbB2 / HER2 (phospho Y877) antibody [EP2324Y] (ab108371)

ab108371, at 1/250, staining Human ErbB2 / HER2 (phospho Y877) in Human breast ductal infiltrating carcinoma tissue by immunohistochemistry.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Western blot - Anti-ErbB2 / HER2 (phospho Y877) antibody [EP2324Y] (ab108371)

**All lanes :** Anti-ErbB2 / HER2 (phospho Y877) antibody [EP2324Y] (ab108371) at 1/1000 dilution

Lane 1: A431 cell lysate - untreated

Lane 2: A431 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 1/100000 dilution

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

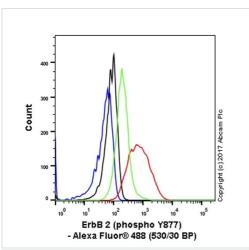
#### Exposure time: 1 minute

Blocking and dilution buffer: 5% NFDM/TBST.

Intracellular Flow Cytometry analysis of A431 (human epidermoid carcinoma) untreated/treated with 200 ng/ml EGF for 15 minutes labeling ErbB2 / HER2 with purified ab108371 at 1/20. Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat Anti-Rabbit lgG H&L (Alexa Fluor® 488)

(ab150077) (1/2000 dilution) was used as the secondary antibody. Rabbit lgG, 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.



Flow Cytometry (Intracellular) - Anti-ErbB2 / HER2 (phospho Y877) antibody [EP2324Y] (ab108371)

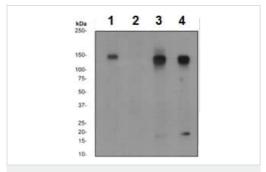
1 2
5ng
1ng
0.1ng
0.01ng
0.01ng

Dot Blot - Anti-ErbB2 / HER2 (phospho Y877) antibody [EP2324Y] (ab108371)

Dot blot analysis of ErbB 2 (pY877) peptide (Lane 1) and ErbB2 / HER2 non-phospho peptide (Lane 2) labelling ErbB 2 (phospho Y877) with ab108371 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 Y877) antibody [EP2324Y] (ab108371)

**All lanes :** Anti-ErbB2 / HER2 (phospho Y877) antibody [EP2324Y] (ab108371) at 1/500 dilution

Lane 1: HeLa cell lysate

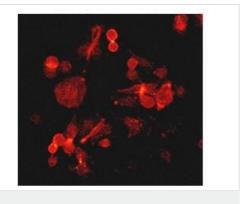
Lane 2: EGF treated HeLa cell lysate

Lane 3: SKBR-3 cell lysate

Lane 4: EGF treated SKBR-3 cell lysate

Lysates/proteins at 10 µg per lane.

Predicted band size: 138 kDa



Immunocytochemistry/ Immunofluorescence - Anti-ErbB2 / HER2 (phospho Y877) antibody [EP2324Y] (ab108371)

ab108371, at 1/50 dilution, staining Human ErbB2 / HER2 (phospho Y877) in SKBR-3 cells by immunofluorescence.



[EP2324Y] (ab108371)

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 <a href="https://www.abcam.co.jp/abpromise">https://www.abcam.co.jp/abpromise</a> or contact our technical team.

#### Terms and conditions

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