# abcam

# Product datasheet

# Anti-ErbB2 / HER2 (phospho Y877) antibody ab47262

★★★★★ 3 Abreviews 9 References 画像数 5

#### 製品の概要

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

製品の詳細 Rabbit polyclonal to ErbB2 / HER2 (phospho Y877)

由来種 Rabbit

アプリケーション 適用あり: IHC-P, WB

種交差性 交差種: Mouse, Human

免疫原 Synthetic peptide corresponding to Human ErbB2/ HER2 aa 850-950 (phospho Y877).

Database link: P04626

ポジティブ・コントロール IHC-P: Human breast carcinoma tissue; Mouse placenta tissue. WB: HepG2 and HeLa cell

lysates; GGF-treated Rat Schwann cell lysate.

特記事項

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

#### 製品の特性

製品の状態 Liquid

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: 7.40

Preservative: 0.02% Sodium azide

Constituents: PBS, 50% Glycerol (glycerin, glycerine), 0.87% Sodium chloride

Without Mg+2 and Ca+2

精製度 Immunogen affinity purified

特記事項(精製) This antibody was affinity purified from rabbit antiserum by affinity chromatography using epitope

specific phosphopeptide. The antibody against non phosphopeptide was removed by chromatography using non phosphopeptide corresponding to the phosphorylation site.

ポリ/モノ ポリクローナル

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## 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ab47262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
IHC-P		Use at an assay dependent concentration.
WB	<b>★★★☆☆</b> (3)	1/500 - 1/1000. Predicted molecular weight: 138 kDa.

#### 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

関連疾患

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

# 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

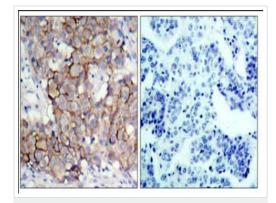
Autophosphorylated. Autophosphorylation occurs in trans, i.e. one subunit of the dimeric receptor phosphorylates tyrosine residues on the other subunit (Probable). Ligand-binding increases phosphorylation on tyrosine residues (PubMed:27134172). Signaling via SEMA4C promotes phosphorylation at Tyr-1248 (PubMed:17554007). Dephosphorylated by PTPN12

(PubMed:27134172).

# 細胞内局在

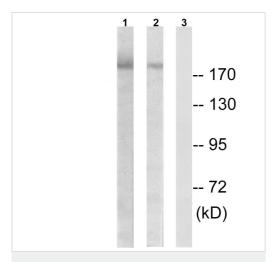
Cytoplasm. Nucleus and Cell membrane. Cytoplasm, perinuclear region. Nucleus. Translocation to the nucleus requires endocytosis, probably endosomal sorting and is mediated by importin beta-1/KPNB1.

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Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ErbB2 / HER2 (phospho Y877) antibody (ab47262)

Staining of phosphorilated ErB 2 on breast carcinoma tissue sections using ab47262 at a 1/50 dilution. Right panel: the antibody was pre-incubated with synthesized phosphopeptide.



Western blot - Anti-ErbB2 / HER2 (phospho Y877) antibody (ab47262)

**All lanes :** Anti-ErbB2 / HER2 (phospho Y877) antibody (ab47262) (Anti-ErbB2 / HER2 (phospho Y877) antibody)

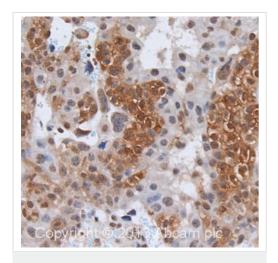
Lane 1 : HepG2 cell lysate

Lane 2 : HeLa cell lysate

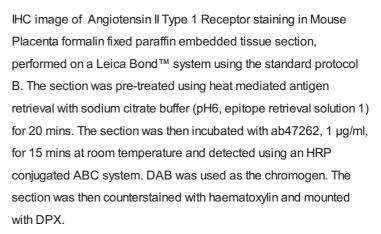
Lane 3: HepG2 cell lysate (blocked with the phospho peptide)

Predicted band size: 138 kDa

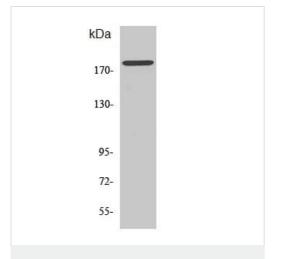
Western blot analysis of HepG2 and HeLa cell lysate using Anti-ErbB2 / HER2 (phospho Y877) antibody (ab47262).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ErbB2 / HER2 (phospho Y877) antibody (ab47262)

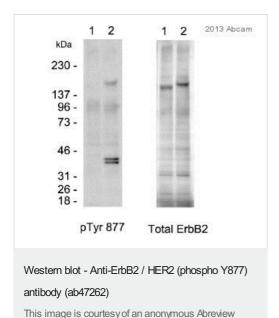


For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



Western blot - Anti-ErbB2 / HER2 (phospho Y877) antibody (ab47262)

Western blot analysis of HeLa cell lysate using Anti-ErbB2 (phospho Y877) antibody (ab47262) at 1/500 dilution.



**All lanes :** Anti-ErbB2 / HER2 (phospho Y877) antibody (ab47262) 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 at tyrosine 877 (ab47262) in rat Schwann cells upon incubation with 10 ng/ml GGF for 30 minutes (lane 2).

Incubation with 10 ng/ml GGF for 30 minutes does not change the amount of total ErbB2 in rat Schwann cells (as shown on right hand side lanes).

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