

# Anti-ErbB4 / HER4 (phospho Y1284) antibody [EPR2273(2)] ab109273

リコンビナント **RabMAb**

★★★★★ **1 Abreviews** **7 References** **画像数 4**

### 製品の概要

製品名	Anti-ErbB4 / HER4 (phospho Y1284) antibody [EPR2273(2)]
製品の詳細	Rabbit monoclonal [EPR2273(2)] to ErbB4 / HER4 (phospho Y1284)
由来種	Rabbit
特異性	<p>This antibody detects ErbB4 / HER4 phosphorylated at Tyrosine 1284 and may also detect Erbb2/HER2 phosphorylated at Tyrosine 1248.</p> <p><i>Stimulation may be required to allow detection of the phosphorylated protein. Please see images below for recommended treatment conditions and positive controls.</i></p>
アプリケーション	<p><b>適用あり:</b> WB, Dot blot</p> <p><b>適用なし:</b> Flow Cyt (Intra), ICC/IF, IHC-P or IP</p>
種交差性	<b>交差種:</b> 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: A431 treated with 50mM pervanadate for 5 min whole cell lysate and A431 treated with 100 ng/ml Epidermal Growth Factor (EGF) for 30 min whole cell lysate.
特記事項	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <b><a href="#">see here</a></b>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <b><a href="#">RabMAb<sup>®</sup> patents</a></b>.</p>

### 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	<p>pH: 7.20</p> <p>Preservative: 0.01% Sodium azide</p>

	Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR2273(2)
アイソタイプ	IgG

## アプリケーション

**The Abpromise guarantee** **Abpromise保証は、次のテスト済みアプリケーションにおけるab109273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確認ください。

アプリケーション	Abreviews	特記事項
WB	★★★★★ (1)	1/1000 - 1/10000. Detects a band of approximately 180 kDa (predicted molecular weight: 147 kDa).
Dot blot		1/1000.

**追加情報** Is unsuitable for Flow Cyt (Intra), ICC/IF, IHC-P or IP.

## ターゲット情報

<b>機能</b>	Specifically binds and is activated by neuregulins, NRG-2, NRG-3, heparin-binding EGF-like growth factor, betacellulin and NTAK. Interaction with these factors induces cell differentiation. Not activated by EGF, TGF- $\alpha$ , and amphiregulin. The C-terminal fragment (CTF) of isoform JMA-A CYT-2 (containing E4ICD2) can stimulate transcription in the presence of YAP1. ERBB4 intracellular domain is involved in the regulation of cell growth. Conflicting reports are likely due at least in part to the opposing effects of the isoform-specific and nuclear-translocated ERBB4 intracellular domains (E4ICD1 and E4ICD2). Overexpression studies in epithelium show growth inhibition using E4ICD1 and increased proliferation using E4ICD2. E4ICD2 has greater in vitro kinase activity than E4ICD1. The kinase activity is required for the nuclear translocation of E4ICD2.
<b>組織特異性</b>	Expressed at highest levels in brain, heart, kidney, in addition to skeletal muscle, parathyroid, cerebellum, pituitary, spleen, testis and breast. Lower levels in thymus, lung, salivary gland, and pancreas. Isoform JM-A CYT-1 and isoform JM-B CYT-1 are expressed in cerebellum, but only the isoform JM-B is expressed in the heart.
<b>配列類似性</b>	Belongs to the protein kinase superfamily. Tyr protein kinase family. EGF receptor subfamily. Contains 1 protein kinase domain.
<b>翻訳後修飾</b>	Isoform JM-A CYT-1 and isoform JM-A CYT-2 but not isoform JM-B CYT-1 and isoform JM-B CYT-2 are processed by ADAM17. Proteolytic processing in response to ligand or 12-O-tetradecanoylphorbol-13-acetate stimulation results in the production of 120 kDa soluble receptor forms and intermediate membrane-anchored 80 kDa fragments (m80HER4), which are further processed by a presenilin-dependent gamma-secretase to release the respective cytoplasmic intracellular domain E4ICD (either E4ICD1/s80Cyt1 or E4ICD2/s80Cyt2). Membrane-anchored 80 kDa fragments of the processed isoform JM-A CYT-1 are more readily degraded by the proteasome than fragments of isoform JM-A CYT-2 suggesting a prevalence of E4ICD2 over E4ICD1. Ligand-binding increases phosphorylation on tyrosine residues. Isoform JM-A CYT-2 is

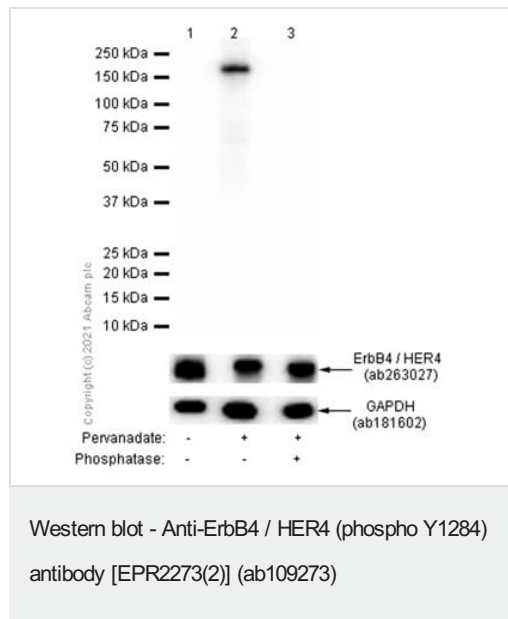
constitutively phosphorylated on tyrosine residues in a ligand-independent manner. E4ICD2 but not E4ICD1 is phosphorylated on tyrosine residues.

Ubiquitinated. The ERBB4 intracellular domain is ubiquitinated and targeted to proteosomal degradation during mitosis mediated by the APC/C complex. Isoform JM-A CYT-1 and isoform JM-B CYT-1 are ubiquitinated by WWP1. The ERBB4 intracellular domain (E4ICD1) is ubiquitinated, and this involves NEDD4.

## 細胞内局在

Membrane and Nucleus. Following proteolytical processing E4ICD (E4ICD1 or E4ICD2 generated from the respective isoforms) is translocated to the nucleus. Significantly more E4ICD2 than E4ICD1 is found in the nucleus. E4ICD2 colocalizes with YAP1 in the nucleus.

## 画像



**All lanes :** Anti-ErbB4 / HER4 (phospho Y1284) antibody [EPR2273(2)] (ab109273) at 1/1000 dilution

**Lane 1 :** Untreated A431 (Human epidermoid carcinoma epithelial cell) whole cell lysate

**Lane 2 :** A431 treated with 50mM pervanadate for 5 min whole cell lysate

**Lane 3 :** A431 treated with 50mM pervanadate for 5 min whole cell lysate, then the membrane treated with Alkaline Phosphatase for 1 hour

Lysates/proteins at 15 µg per lane.

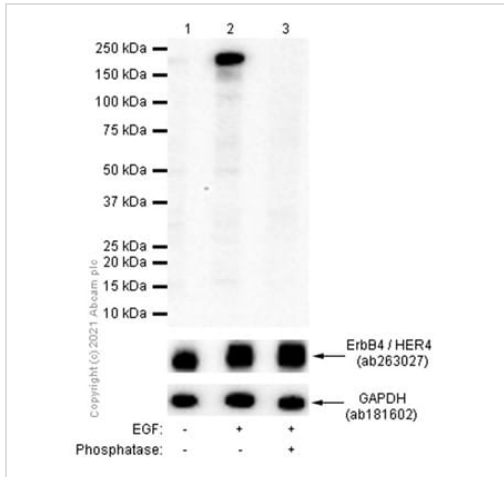
## Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

**Predicted band size:** 147 kDa

**Observed band size:** 180 kDa

**Blocking and diluting buffer:** 5% NFDM/TBST



Western blot - Anti-ErbB4 / HER4 (phospho Y1284) antibody [EPR2273(2)] (ab109273)

**All lanes :** Anti-ErbB4 / HER4 (phospho Y1284) antibody [EPR2273(2)] (ab109273) at 1/1000 dilution

**Lane 1 :** Untreated A431 (Human epidermoid carcinoma epithelial cell) whole cell lysate

**Lane 2 :** A431 treated with 100 ng/ml Epidermal Growth Factor (EGF) for 30 min whole cell lysate

**Lane 3 :** A431 treated with 100 ng/ml Epidermal Growth Factor (EGF) for 30 min whole cell lysate, then the membrane treated with Alkaline Phosphatase for 1 hour

Lysates/proteins at 15 µg per lane.

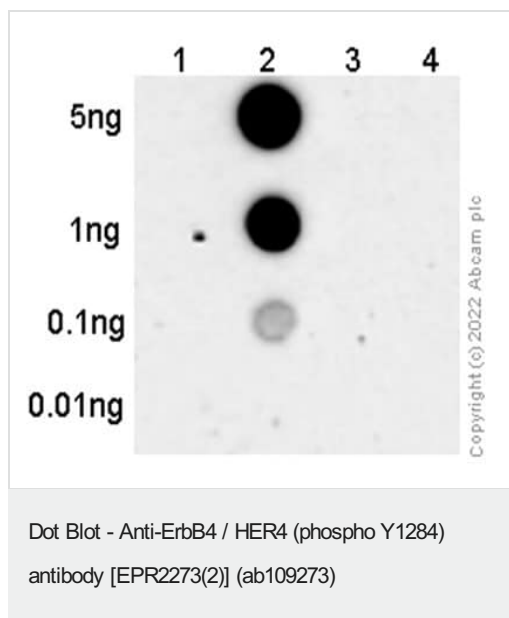
## Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

**Predicted band size:** 147 kDa

**Observed band size:** 180 kDa

**Blocking and diluting buffer:** 5% NFDM/TBST



Dot blot analysis using 1/1000 dilution ab109273 and Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (**ab97051**) secondary at 1/100000 dilution.

**Blocking and diluting buffer:** 5% NFDM/TBST

**Lane 1:** ErbB4 non-phospho peptide

**Lane 2:** ErbB4 Y1284 phospho peptide

**Lane 3:** ErbB2 non-phospho peptide

**Lane 4:** ErbB2 Y1248 phospho peptide

**Exposure time:** 3 minutes

Why choose a recombinant antibody?

<p><b>Research with confidence</b> Consistent and reproducible results</p>	<p><b>Long-term and scalable supply</b> Recombinant technology</p>
<p><b>Success from the first experiment</b> Confirmed specificity</p>	<p><b>Ethical standards compliant</b> Animal-free production</p>

Anti-ErbB4 / HER4 (phospho Y1284) antibody  
[EPR2273(2)] (ab109273)

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