abcam

Product datasheet

Anti-ErbB4 / HER4 (phospho Y1284) antibody [EPR2273(2)] -BSA and Azide free ab232527



重组 RabMAb

4 图像

概述

产品名称 Anti-ErbB4 / HER4 (phospho Y1284)抗体[EPR2273(2)] - BSA and Azide free

描述 兔单克隆抗体[EPR2273(2)] to ErbB4 / HER4 (phospho Y1284) - BSA and Azide free

宿主 Rabbit

特异性 This antibody detects ErbB4 / HER4 phosphorylated at Tyrosine 1284 and may also detect

ErbB2 / HER2 phosphorylated at Tyrosine 1248.

Stimulation may be required to allowdetection of the phosphorylated protein. Please see

images belowfor recommended treatment conditions and positive controls.

经测试应用 适用于: WB, Dot blot

不适用于: Flow Cyt (Intra),ICC/IF,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 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.

常规说明 ab232527 is the carrier-free version of ab109273.

> Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for

increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

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**.

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C. Do Not Freeze.

存储溶液 pH: 7.20

Constituent: PBS

无载体 是

纯**度** Protein A purified

克隆 单克隆

克隆编号 EPR2273(2)

同种型 IgG

应用

The Abpromise guarantee

Abpromise™承诺保证使用ab232527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
WB		Use at an assay dependent concentration. Predicted molecular weight: 147 kDa.
Dot blot		Use at an assay dependent concentration.

应用说明 Is unsuitable for Flow Cyt (Intra),ICC/IF,IHC-P or IP.

靶标

功能

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-A, 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.

组织特异性

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

序列相似性

翻译后修饰

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.

Belongs to the protein kinase superfamily. Tyr protein kinase family. EGF receptor subfamily. Contains 1 protein kinase domain.

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.

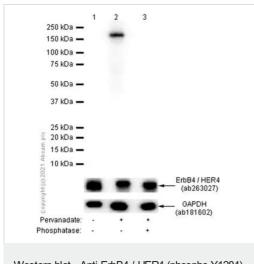
Ligand-binding increases phosphorylation on tyrosine residues. Isoform JM-A CYT-2 is constitutively phosphorylated on tyrosine residues in a ligand-independent manner. E4ICD2 but not E4ICD1 is phosphorylated on tyrosine residues.

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.

细胞定位

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.

图片



Western blot - Anti-ErbB4 / HER4 (phospho Y1284) antibody [EPR2273(2)] - BSA and Azide free (ab232527) **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.

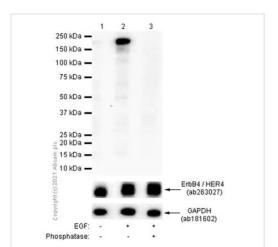
Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

Predicted band size: 147 kDa Observed band size: 180 kDa

Blocking and diluting buffer: 5% NFDM/TBST

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab109273).



Western blot - Anti-ErbB4 / HER4 (phospho Y1284) antibody [EPR2273(2)] - BSA and Azide free (ab232527)

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.

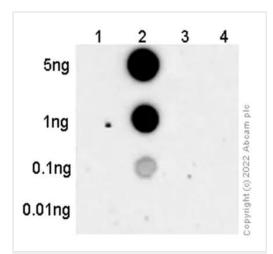
Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

Predicted band size: 147 kDa **Observed band size:** 180 kDa

Blocking and diluting buffer: 5% NFDM/TBST

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab109273</u>).



Dot Blot - Anti-ErbB4 / HER4 (phospho Y1284) antibody [EPR2273(2)] - BSA and Azide free (ab232527)

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

Blocking and diluting buffer: 5% NFDM/TBST

Lane 1: ErbB4 non-phospho peptide

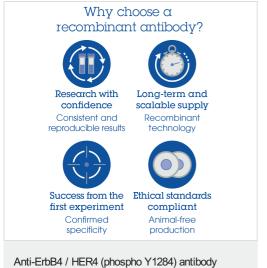
Lane 2: ErbB4 Y1284 phospho peptide

Lane 3: ErbB2 non-phospho peptide

Lane 4: ErbB2 Y1248 phospho peptide

Exposure time: 3 minutes

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab109273).



[EPR2273(2)] - BSA and Azide free (ab232527)

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