# abcam

## Product datasheet

## Anti-ErbB4 / HER4 antibody [5G6B4] - C-terminal ab204959

1 References 4 图像

概述

产品名称 Anti-ErbB4 / HER4抗体[5G6B4] - C-terminal

**抽述** 小鼠单克隆抗体[5G6B4] to ErbB4 / HER4 - C-terminal

**宿主** Mouse

经测试应用 适用于: Flow Cyt, IHC-P, WB

种属反应性 与反应: Human

预测可用于: Mouse 📤

免疫原 Recombinant fragment corresponding to Human ErbB4/ HER4 aa 1150 to the C-terminus (C

terminal). Expressed in E. coli.

Database link: Q15303

Run BLAST with
Run BLAST with

**阳性**对照 Human ErbB 4 (amino acids 1159-1308) recombinant protein. Lysate from HEK293 cells

transfected with ErbB 4 (amino acids 1159-1308). Human cervical cancer tissue. HeLa cells.

常规说明

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

性能

形式 Liquid

**存放说明** Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

存储溶液 Preservative: 0.05% Sodium azide

Constituent: 99% PBS

纯**度** Protein G purified

纯**化**说明 Purified from tissue culture supernatant.

**克隆** 单克隆

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**克隆编号** 5G6B4

**同种型** lgG1

#### 应用

## The Abpromise guarantee Abpromise™承诺保证使用ab204959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   |
|----------|------|--|
| Flow Cyt |      | 1/200 - 1/400.                                       |
| IHC-P    |      | 1/200 - 1/1000.                                      |
| WB       |      | 1/500 - 1/2000. Predicted molecular weight: 147 kDa. |

#### 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 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.

#### 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

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.

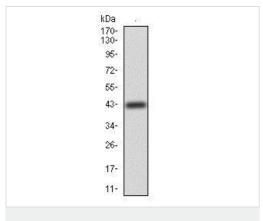
Ubiquitinated. The ERBB4 intracellular domain is ubiquitinated and targeted to proteosomal degradation during mitosis mediated by the APC/C complex. Isoform JM-A CYT-1 and isoform

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



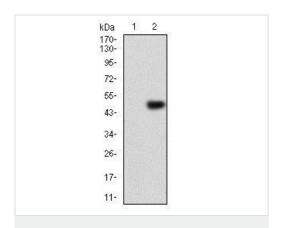
Western blot - Anti-ErbB4 / HER4 antibody [5G6B4]

- C-terminal (ab204959)

Anti-ErbB4 / HER4 antibody [5G6B4] - C-terminal (ab204959) at 1/500 dilution + human ErbB 4 (amino acids 1159-1308) recombinant protein.

Predicted band size: 147 kDa

(Expected MW is 43.3 kDa)



Western blot - Anti-ErbB4 / HER4 antibody [5G6B4]

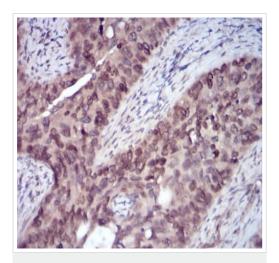
- C-terminal (ab204959)

**All lanes :** Anti-ErbB4 / HER4 antibody [5G6B4] - C-terminal (ab204959) at 1/500 dilution

Lane 1: HEK293 cell lysate.

**Lane 2**: Lysate from HEK293 cells transfected with ErbB 4 (amino acids 1159-1308)-hlgGFc.

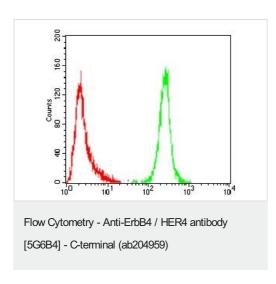
Predicted band size: 147 kDa



human cervical cancer tissue, labeling ErbB4 / HER4 using ab204959 at a 1/200 dilution

Immunohistochemical analysis of paraffin-embedded, DAB-stained

Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ErbB4 / HER4 antibody [5G6B4] - C-terminal (ab204959)



Flow cytometry analysis of HeLa cells labeling ErbB4 / HER4 (green) using ab204959 at a 1/200 dilution, and negative control cells (red).

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