# abcam

## Product datasheet

# Anti-ErbB2 / HER2 antibody [SP3] ab16662



★★★★★ 2 Abreviews 8 References 4 图像

概述

产品名称 Anti-ErbB2 / HER2抗体[SP3]

描述 兔单克隆抗体[SP3] to ErbB2 / HER2

宿主 Rabbit

经测试应用 适用于: IHC-P

不适用于: Flow Cyt,ICC,IHC-Fr,IP or WB

种属反应性 与反应: Human

不与反应: Mouse

免疫原 Recombinant fragment. This information is considered to be commercially sensitive.

表位 Extracellular domain

阳性对照 IHC-P: Human breast carcinoma tissue.

常规说明 This product was switched from a hybridoma to recombinant production method on 5th March

2019.

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**.

This product is FOR RESEARCH USE ONLY. For commercial use, please contact

partnerships@abcam.com.

性能

形式 Liquid

存放说明 Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.

存储溶液

Preservative: 0.1% Sodium azide

Constituents: 1% BSA, PBS

纯**度** Protein A purified

 克隆
 单克隆

 克隆编号
 SP3

 同种型
 IqG

#### 应用

#### The Abpromise quarantee Abpromise™承诺保证使用ab16662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
IHC-P	<b>★★★★★ (1)</b>	1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. ab16662 is not suitable for [IHC-P, Mouse]

应**用说明** Is unsuitable for Flow Cyt,ICC,IHC-Fr,IP or WB.

#### 靶标

功能

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.

组织特异性

疾病相关

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

3.1, 1.3

(

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.

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

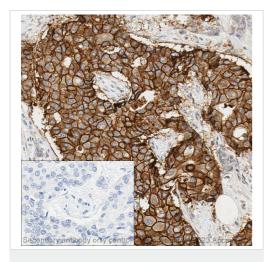
Autophosphorylated. Autophosphorylation occurs in trans, i.e. one subunit of the dimeric receptor phosphorylates tyrosine residues on the other subunit (Probable). Ligand-binding increases

phosphorylation on tyrosine residues (PubMed:27134172). Signaling via SEMA4C promotes phosphorylation at Tyr-1248 (PubMed:17554007). Dephosphorylated by PTPN12 (PubMed:27134172).

细胞定位

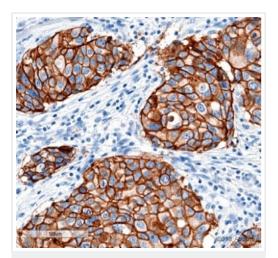
Cytoplasm. Nucleus and Cell membrane. Cytoplasm, perinuclear region. Nucleus. Translocation to the nucleus requires endocytosis, probably endosomal sorting and is mediated by importin beta-1/KPNB1.

#### 图片



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ErbB2 / HER2 antibody [SP3] (ab16662)

Immunohistochemical analysis of formalin fixed paraffin embedded human breast cancer labelling ErbB2 with ab16662 at a concentration of 0.16 μg/ml. The immunostaining was performed on a Ventana DISCOVERY ULTRA (Roche Tissue Diagnostics) instrument with an OptiView DAB IHC Detection Kit. Heat mediated antigen retrieval was conducted for 32 mins at 100°C with ULTRA cell conditioning solution (CC1, pH 8.5). ab16662 anti-ErbB2 / HER2 antibody [SP3] was incubated at 37°C for 16 mins. Sections were counterstained with Hematoxylin II. Image inset shows absence of staining in secondary antibody only control.

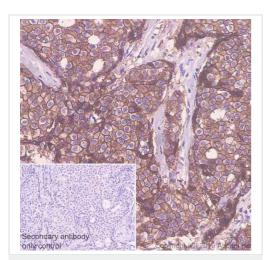


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ErbB2 / HER2 antibody [SP3] (ab16662)

This image is courtesy of an Abreview submitted by Mr. Allan Wang.

Formalin-fixed, paraffin-embedded human breast invasive ductal carcinoma tissue stained for ErbB2 / HER2 using ab16662 at 1/200 dilution in immunohistochemical analysis, followed by Goat anti Rabbit IgG HRP. Heat mediated antigen retrieval was done using a pH 8.5 buffer.

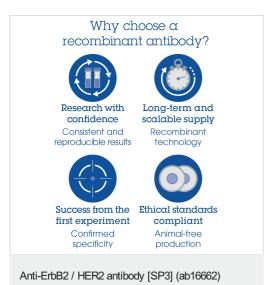
This image was generated from the hybridoma version.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ErbB2 / HER2 antibody [SP3] (ab16662)

Immunohistochemical analysis of paraffin-embedded Human breast carcinoma tissue labeling ErbB 2 with ab16662, followed by a ready to use Goat Anti-Rabbit & Mouse IgG (HRP). Positive staining on Human breast carcinoma, performed on a Leica Biosystems BOND® RX instrument. The section was incubated with ab16662 for 10 mins at room temperature. Counterstained with Hematoxylin. Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 1 (pH 6.0) for 10 minutes. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Goat Anti-Rabbit & Mouse IgG (HRP).

This image was generated from the hybridoma version.



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