# abcam

# Product datasheet

# Recombinant human ErbB2 / HER2 (mutated V777L) protein ab207945

### 4 图像

#### 描述

产品名称 重组人ErbB2 / HER2 (mutated V777L)蛋白

生物活性 The specific activity of ab207945 was determined to be 14 nmol/min/mg.

纯**度** > 90 % Densitometry.

Affinity purified.

表达系统 Baculovirus infected Sf9 cells

Accession P04626

**蛋白长度** Protein fragment

无动物成分 No

性质 Recombinant

**种属** Human

序列 KRRQQKIRKYTMRRLLQETELVEPLTPSGAMPNQAQMRILKE

TELRKVKV

LGSGAFGTVYKGIWIPDGENVKIPVAIKVLRENTSPKANKEI

LDEAYVMA

GLGSPYVSRLLGICLTSTVQLVTQLMPYGCLLDHVRENRGRL

GSQDLLNW

 ${\tt CMQIAKGMSYLEDVRLVHRDLAARNVLVKSPNHVKITDFGLA}$ 

RLLDIDET

EYHADGGKVPIKWMALESILRRRFTHQSDVWSYGVTVWELMT

FGAKPYDG

IPAREIPDLLEKGERLPQPPICTIDVYMIMVKCWMIDSECRP

**RFRELVSE** 

FSRMARDPQRFVVIQNEDLGPASPLDSTFYRSLLEDDDMGDL

**VDAEEYLV** 

 ${\tt PQQGFFCPDPAPGAGGMVHHRHRSSSTRSGGGDLTLGLEPSE}$ 

**EEAPRSPL** 

APSEGAGSDVFDGDLGMGAAKGLQSLPTHDPSPLQRYSEDPT

VPI PSETD

GYVAPLTCSPQPEYVNQPDVRPQPPSPREGPLPAARPAGATL

**ERPKTLSP** 

GKNGVVKDVFAFGGAVENPEYLTPQGGAAPQPHPPPAFSPAF

DNLYYWDQ DPPERGAPPSTFKGTPTAENPEYLGLDVPV

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预测分子量 110 kDa including tags

**氨基酸** 676 to 1255

修饰 mutated V777L

标签 GST tag N-Terminus

额外的序列信息 Cytoplasmic domain (NM\_004448).

#### 技术指标

Our Abpromise quarantee covers the use of ab207945 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

应用 SDS-PAGE

**Functional Studies** 

形式 Liquid

#### 制备和贮存

稳定性和存储 Shipped on Dry Ice. Upon delivery aliquot. Store at -80°C. Avoid freeze / thaw cycle.

pH: 7.50

Constituents: 0.79% Tris HCI, 0.87% Sodium chloride, 0.31% Glutathione, 0.003% EDTA,

0.002% PMSF, 0.004% DTT, 25% Glycerol (glycerin, glycerine)

This product is an active protein and may elicit a biological response in vivo, handle with caution.

#### 常规信息

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 Expressed in a variety of tumor tissues including primary breast tumors and tumors from small

bowel, esophagus, kidney and mouth.

疾病相关 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.

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#### 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

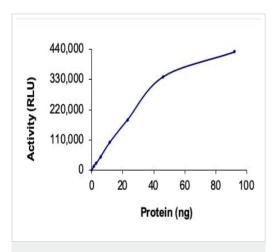
Cytoplasm. Nucleus and Cell membrane. Cytoplasm, perinuclear region. Nucleus. Translocation to the nucleus requires endocytosis, probably endosomal sorting and is mediated by importin beta-1/KPNB1.

#### 图片



SDS-PAGE - Recombinant human ErbB2 / HER2 (mutated V777L) protein (ab207945)

SDS PAGE analysis of ab207945



Functional Studies - Recombinant human ErbB2/

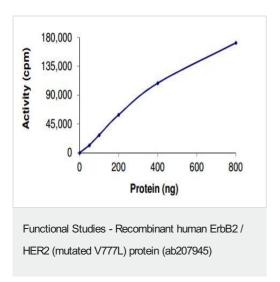
HER2 (mutated V777L) protein (ab207945)

The specific activity of ErbB2 / HER2 (ab207945) was determined to be 33 nmol /min/mg as per activity assay protocol.

170 130 95 72 55 43 34 26 SDS-PAGE - Recombinant human ErbB2 / HER2

(mutated V777L) protein (ab207945)

SDS-PAGE analysis of ab207945.



Sample Kinase Activity assay plot using ab207945, showing the specific activity to be 14 nmol/min/mg.

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