abcam

Product datasheet

Recombinant human ErbB4 / HER4 protein (Fc Chimera Active) ab219711

2 图像

描述

产品名称 重组人ErbB4 / HER4蛋白(Fc Chimera Active)

生物活性 Immobilized ab219711 at 2 μg/mL (100 μL/well) can bind Human NRG1-beta 1 protein with a

linear range of 0.6-10 ng/mL.

纯**度** > 90 % SDS-PAGE.

 内毒素水平
 < 1.000 Eu/μg</td>

 表达系统
 HEK 293 cells

 Accession
 Q15303-1

蛋白长度 Protein fragment

无动物成分 No

性质 Recombinant

种属 Human

序列 QSVCAGTENKLSSLSDLEQQYRALRKYYENCEVVMGNLEITS

IEHNRDLS

FLRSVREVTGYVLVALNQFRYLPLENLRIIRGTKLYEDRYAL

AIFLNYRK

DGNFGLQELGLKNLTEILNGGVYVDQNKFLCYADTIHWQDIV

RNPWPSNL

 ${\tt TLVSTNGSSGCGRCHKSCTGRCWGPTENHCQTLTRTVCAEQC}$

DGRCYGPY

VSDCCHRECAGGCSGPKDTDCFACMNFNDSGACVTQCPQTFV

YNPTTFQL

 ${\tt EHNFNAKYTYGAFCVKKCPHNFVVDSSSCVRACPSSKMEVEE}$

NGIKMCKP

CTDICPKACDGIGTGSLMSAQTVDSSNIDKFINCTKINGNLI

FLVTGIHG

DPYNAIEAIDPEKLNVFRTVREITGFLNIQSWPPNMTDFSVF

SNLVTIGG

RVLYSGLSLLILKQQGITSLQFQSLKEISAGNIYITDNSNLC

YYHTINWT

TLFSTINQRIVIRDNRKAENCTAEGMVCNHLCSSDGCWGPGP

DQCLSCRR

 ${\tt FSRGRICIESCNLYDGEFREFENGSICVECDPQCEKMEDGLL}$

TCHGPGPD

NCTKCSHFKDGPNCVEKCPDGLQGANSFIFKYADPDRECHPC

HPNCTQGC NGPTSHDCIYYPWTGHSTLPQHARTP

预测分子量 96 kDa including tags

氨基酸 26 to 651

标签 Fc tag C-Terminus

额外的序列信息 Extracellular domain fused with a human lgG1 Fc tag at the C-terminus (P01857).

技术指标

Our <u>Abpromise guarantee</u> covers the use of ab219711 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

ELISA

形式 Lyophilized

制备和贮存

稳定性和存储 Shipped at 4°C. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

pH: 7.40

Constituents: 5% Trehalose, PBS

Note: 5-10% trehalose is commonly used for freeze drying, and after reconstitution, the trehalose

is mostly about 3-5%. Lyophilised from 0.22 µm filtered solution.

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

复溶 Reconstitute with sterile deionized water to a concentration of 200 µg/ml.

常规信息

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

翻译后修饰

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.

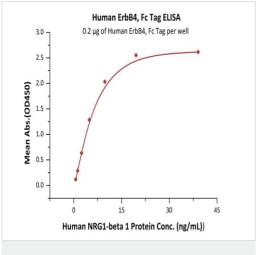
Ligand-binding increases phosphorylation on tyrosine residues. Isoform JM-A CYT-2 is constitutively phosphorylated on tyrosine residues in a ligand-independent manner. E4ICD2 but not E4ICD1 is phosphorylated on tyrosine residues.

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

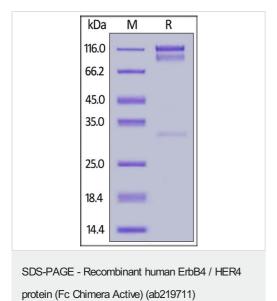
Membrane and Nucleus. Following proteolytical processing E4ICD (E4ICD1 or E4ICD2 generated from the respective isoforms) is translocated to the nucleus. Significantly more E4ICD2 than E4ICD1 is found in the nucleus. E4ICD2 colocalizes with YAP1 in the nucleus.

图片



Functional Studies - Recombinant human ErbB4 / HER4 protein (Fc Chimera Active) (ab219711)

Immobilized ab219711 at 2 μ g/mL (100 μ L/well) can bind Human NRG1-beta 1 protein with a linear range of 0.6-10 μ g/mL.



ab219711 on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The protein migrates as 90-106 kDa and 116-120 kDa under reducing condition due to glycosylation.

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