abcam

Product datasheet

Recombinant human ErbB4 / HER4 protein ab155610

画像数 2

製品の詳細

製品名 Recombinant human ErbB4 / HER4 protein

生理活性 Measured by its ability to inhibit the biological activity of Neuregulin-1-ß1 on MCF7 Human breast

cancer cells. In the presence of 10 ng/ml of Recombinant Human NRG1-ß1/HRG1-ß1 Extracellular

Domain.

The ED $_{50}$ for this effect is typically 0.2-2.5 μ g/ml.

精製度 > 95 % SDS-PAGE.

エンドトキシン・レベル < 1.000 Eu/μg

発現系 HEK 293 cells

アクセッション番号 <u>Q15303</u>

タンパク質長 Protein fragment

Animal free No

由来 Recombinant

生物種 Human

配列 QSVCAGTENKLSSLSDLEQQYRALRKYYENCEVVMGNLEITS

IEHNRDLS FLRSVREVTG

YVLVALNQFRYLPLENLRIIRGTKLYEDRYALAIFLNY

RKDGNFGLQELGLKNLTEILNG GVYVDQNKFLCYADTIHWQDIVRNPW

PSNLTLVSTNGSSGCGRCHKSCTGRCWGPTENHC

QTLTRTVCAEQCDG

RCYGPYVSDCCHRECAGGCSGPKDTDCFACMNFNDSGACVTQ

CPQT FV

YNPTTFQLEHNFNAKYTYGAFCVKKCPHNFVVDSSSCVRACP

SSKMEVEE NGIKMCKP

CTDICPKACDGIGTGSLMSAQTVDSSNIDKFINCTKINGN

LIFLVTGIHGDPYNAIEAID

PEKLNVFRTVREITGFLNIQSWPPNMTD

FSVFSNLVTIGGRVLYSGLSLLILKQQGITSL

QFQSLKEISAGNIYIT

DNSNLCYYHTINWTTLFSTINQRIVIRDNRKAENCTAEGMVC

NH LCSS

DGCWGPGPDQCLSCRRFSRGRICIESCNLYDGEFREFENGSI CVECDPQC EKMEDG

LLTCHGPGPDNCTKCSHFKDGPNCVEKCPDGLQGANSFIFKY

ADPDRECHPCHPNCTQGC

NGPTSHDCIYYPWTGHSTLPQHARTP

予測される分子量 71 kDa including tags

領域 26 to 651

サブ His tag C-Terminus

特性

Our **Abpromise guarantee** covers the use of **ab155610** in the following tested applications.

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

アプリケーション Functional Studies

SDS-PAGE

製品の状態 Lyophilized

前処理および保存

保存方法および安定性 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

pH: 7.40

Constituents: 95% PBS, 5% Trehalose

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

再構成 It is recommended to reconstitute the lyophilized protein in sterile deionized water to a final

concentration of 200ug/ml. Solubilize for 30 to 60 minutes at room temperature with occasional gentle mixing. Carrier protein (0.1% HSA or BSA) is strongly recommended for further dilution

and long term storage.

関連情報

機能 Specifically binds and is activated by neuregulins, NRG-2, NRG-3, heparin-binding EGF-like

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

growth factor, betacellulin and NTAK. Interaction with these factors induces cell differentiation. Not

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.

組織特異性 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.

配列類似性 Belongs to the protein kinase superfamily. Tyr protein kinase family. EGF receptor subfamily.

翻訳後修飾

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.

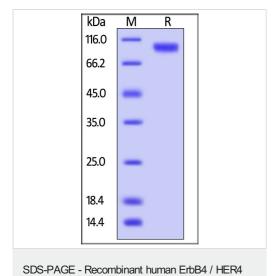
Ubiquitinated. The ERBB4 intracellular domain is ubiquitinated and targeted to proteosomal degradation during mitosis mediated by the APC/C complex. Isoform JM-A CYT-1 and isoform JM-B CYT-1 are ubiquitinated by WWP1. The ERBB4 intracellular domain (E4ICD1) is ubiquitinated, and this involves NEDD4.

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.

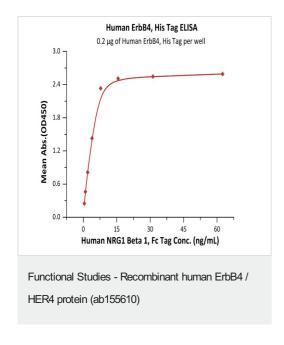
protein (ab155610)

画像

細胞内局在



Human ErbB4, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.



Immobilsed ab155610 at 2 μ g/mL (100 μ L/well) can bind Human NRG1 Beta 1, Fc Tag with a linear range of 0.5-8 ng/mL

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