

Recombinant human ErbB4/Her4 protein

Catalog Number: ATGP4044

PRODUCT INFORMATION

Expression system

HEK293

Domain

26-649aa

UniProt No.

Q15303

NCBI Accession No.

NP_005226.1

Alternative Names

Receptor tyrosine-protein kinase erbB-4, Proto-oncogene-like protein c-ErbB-4, Tyrosine kinase-type cell surface receptor HER4, p180erbB4, 4ICD, E4ICD, s80HER4, ERBB4, HER4, receptor tyrosine-protein kinase erbB-4 isoform JM-a/CVT-1, receptor tyrosine-protein kinase erbB-4, tyrosine kinase-type cell surface receptor HER4, avian erythroblastic leukemia viral (v-erb-b2) oncogene homolog 4, proto-oncogene-like protein c-ErbB-4, v-erb-a erythroblastic leukemia viral oncogene homolog 4, v-erb-b2 avian erythroblastic leukemia viral oncogene homolog 4, human epidermal growth factor receptor 4, ALS19

PRODUCT SPECIFICATION

Molecular Weight

96.6kDa (863aa)

Concentration

0.25mg/ml (determined by Absorbance at 280nm)

Formulation

Liquid. In Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity

> 90% by SDS - PAGE

Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

Biological Activity

Measured by its binding ability in a functional ELISA with Human NRG1/HRG1 (CAT# ATGP3990). The ED50 range \leq 0.2 ug/ml.

Tag

hIgG-His-Tag

Application

SDS-PAGE, Bioactivity

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid

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repeated freezing and thawing cycles.

BACKGROUND

Description

ErbB4, also known as Her4, is a receptor tyrosine kinase that is a member of the epidermal growth factor receptor family. ErbB family members serve as receptors for the EGF family of growth factors. It is a single-pass type I transmembrane protein with multiple furin-like cysteine rich domains, a tyrosine kinase domain, a phosphatidylinositol-3 kinase binding site and a PDZ domain binding motif. It is expressed in normal skeletal muscle, heart, pituitary, brain and several breast carcinomas. ErbB4 ligands include the neuregulins, beta-cellulin and heparin-binding EGF-like growth factor (HB-EGF). Monomeric ErbB4 binds its ligands with low affinity. ErbB4 appears to play important roles in neuronal development, development of the heart and cancer. Single-nucleotide polymorphisms in ERBB4 have also been found in a study of patients with familial amyotrophic lateral sclerosis type 19. Recombinant human ErbB4, fused to hIgG-His-tag at C-terminus, was expressed in HEK293 and purified by using conventional chromatography techniques.

Amino acid Sequence

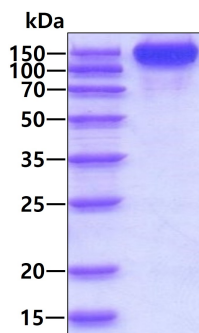
QSV CAGTENK LSSLSDLEQQ YRALRKYEN CEVVMGNLEI TSIEHNRDLS FLRSVREVTG YVLVALNQFR YLPLENLR II
 RGTKLYEDRY ALAIFLNRYK DGNFGLQELG LKNLTEILNG GVVVDQNKFL CYADTIHWQD IVRNPWPSNL TLVSTNGSSG
 CGRCHKSC TG RCWGPTENHC QTLTRTVCAE QCDGR CYGPY VSDCCHRECA GGCSGPKDTD CFACMNFNDS
 GACVTQCPQT FVYNPTTFQL EHNFNKYTY GAFVCVKCPH NFVVDSSSCV RACPSSKMEV EENGKMKCKP CTDICPKACD
 GIGTGSLMSA QTV DSSNIDK FINCTKINGN LIFLVTGIHG DPYNAIEAID PEKLN VFRTV REITGFLNIQ SWPPNMTDFS
 VFSNLVTIGG RVLYSGLSLL ILKQQGITS L QFQSLKEISA GNIYITDNSN LCYYHTINWT TLFSTINQRI VIRDNRKAEN
 CTAEGMVCNH LCSSDGCWGP GPDQCLSCRR FSRGRICIES CNLYDGEFRE FENGSI CVEC DPQCEK MEDG LLTCHGPGPD
 NCTKCSHF KD GPNCVEKCPD GLQGANSFIF KYADPDRECH PCHPNCTQGC NGPTSHDCIY YPWTGHSTLP QHAR<LEPKSC
 DKHTHCPPCP APELLGGPSV FLFPPKPKDT LMISRTPEVT CVVVDVSHED PEVKFNWYVD GVEVHNAKTK PREEQYNSTY
 RVVSVLTVLH QDWLNGKEYK CKVSNKALPA PIEKTISKAK GQPREPQVYT LPPSRDELTK NQVSLTCLVK GFYPSDIAVE
 WESNGQPENN YKTTTPVLDS DGSFFLYSKL TVDKSRWQOG NVFSCSV MHE ALHNHYTQKS LSLSPGKHHH HHH>

General References

- Silberberg G., et al, (2006) American Journal of Medical Genetics Part B. 141B: 142-148.
- C Rio. et al, (2000) J Biol Chem. 275:10379-10387.
- Zimonjic DB., et al, (1995) Oncogene. 10:1235-1237.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain

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Biological Activity

Human NRG1/HRG1 (CAT# ATGP3990) is coated at 10 ug/ml (100 ul/well) can bind Human ERBB4. The ED50 range \leq 0.2 ug/ml.

