

ERBB4 recombinant protein

ErbB4 Protein, Human, Rhesus, Recombinant (His Tag)

CATALOG #
AAA257418

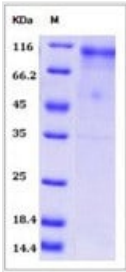
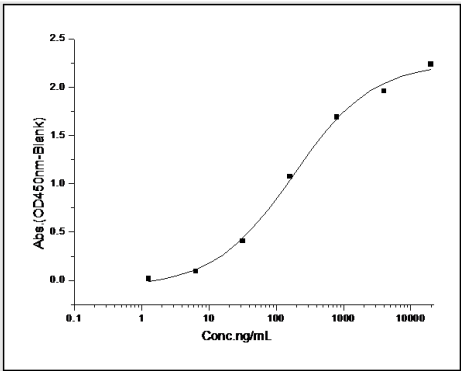
HOST
HEK293 Cells

PRODUCT SYNONYMS

ErbB4; ErbB4 Protein; Human; Rhesus; Recombinant (His Tag); Human/Rhesus HER4/ErbB4 Protein (His Tag); erb-b2 receptor tyrosine kinase 4; ERBB4 recombinant protein

PRODUCT SPECIFICATIONS

Host	HEK293 Cells
Purity/Purification	>85 % as determined by SDS-PAGE
Form/Format	Lyophilized from sterile PBS, pH7.4. Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.
Sequence Positions	635aa
Sequence	Met1-Arg649
Species	Human, Rhesus
Tag	C-His
Endotoxin	<1.0EU per ug of the protein as determined by the LAL method
Predicted N Terminal	Gln26
Protein Construction	JA DNA sequence encoding the human ERBB4 (NP_005226.1) (Met1-Arg649) with a C-terminal polyhistidine tag was expressed. Human and Rhesus ERBB4 sequences are identical
Activity	Measured by its binding ability in a functional ELISA. Immobilized human ErbB4-His at 10ug/ml (100ul/well) can bind biotinylated human NRG1 (Cat:11609-H01H2). The EC50 of biotinylated human NRG1 (Cat:11609-H01H2) is 0.4-0.92ug/ml.
Preparation and Storage	Samples are stable for up to twelve months from date of receipt at -20 degree C to -80 degree C. Store it under sterile conditions at -20 degree C to -80 degree C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. Shipping: They are shipped out with blue ice pack



Application Data

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Measured by its binding ability in a functional ELISA. Immobilized human ErbB4-His at 10 ug/ml (100 ul/well) can bind biotinylated human NRG1 (Cat: 11609-H01H2). The EC50 of biotinylated human NRG1 (Cat: 11609-H01H2) is 0.4-0.92 ug/ml.

ADDITIONAL INFORMATION

Related Product Information for ERBB4 recombinant protein	ERBB4 is a single-pass type I membrane protein with multiple cysteine rich domains, a transmembrane domain, a tyrosine kinase domain, a phosphatidylinositol-3 kinase binding site and a PDZ domain binding motif. ERBB4 is expressed at highest levels in brain, heart, kidney, in addition to skeletal muscle, parathyroid, cerebellum, pituitary, spleen, testis and breast. And lower levels in thymus, lung, salivary gland, and pancreas. It specifically binds to and is activated by neuregulins, NRG-2, NRG-3, heparin-binding EGF-like growth factor, betacellulin and NTAK. ERBB4 also can be activated by other factors and induces a variety of cellular responses including mitogenesis and differentiation. ERBB4 regulates development of the heart, the central nervous system and the mammary gland, gene transcription, cell proliferation, differentiation, migration and apoptosis. It is required for normal cardiac muscle differentiation during embryonic development, and for postnatal cardiomyocyte proliferation. ERBB4 also play a role on the normal development of the embryonic central nervous system, especially for normal neural crest cell migration and normal axon guidance. It is required for mammary gland differentiation, induction of milk proteins and lactation.
Product Categories/Family for ERBB4 recombinant protein	Cancer Drug Targets Receptor Tyrosine Kinases (RTKs)
References	Huang, Y Z, et al. (2000) Regulation of neuregulin signaling by PSD-95 interacting with ErbB4 at CNS synapses. Neuron. 26(2):443-55. Garcia, R A, et al. (2000) The neuregulin receptor ErbB-4 interacts with PDZ-containing proteins at neuronal synapses. Proc Natl Acad Sci. 97(7):3596-601. Silberberg G, et al. (2006) The involvement of ErbB4 with schizophrenia: association and expression studies. Am J Med Genet. 141(B2):142-8. Sardi SP, et al. (2006) Presenilin-dependent ErbB4 nuclear signaling regulates the timing of astrogenesis in the developing brain. Cell. 127(1):185-97.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4885215
NCBI GeneID	2066
NCBI Accession #	NP_005226.1
NCBI GenBank Nucleotide #	NM_005235.2
UniProt Accession #	Q15303; Q2M1W1; Q59EW4; B7ZLD7; B7ZLE2; B7ZLE3
Molecular Weight	143,968 Da
NCBI Official Full Name	receptor tyrosine-protein kinase erbB-4 isoform JM-a/CVT-1
NCBI Official Synonym Full Names	erb-b2 receptor tyrosine kinase 4

NCBI Official Symbol	ERBB4
NCBI Official Synonym Symbols	HER4; ALS19; p180erbB4
NCBI Protein Information	receptor tyrosine-protein kinase erbB-4; proto-oncogene-like protein c-ErbB-4; human epidermal growth factor receptor 4; tyrosine kinase-type cell surface receptor HER4; v-erb-a erythroblastic leukemia viral oncogene homolog 4; v-erb-b2 avian erythroblast
UniProt Protein Name	Receptor tyrosine-protein kinase erbB-4
UniProt Gene Name	ERBB4
UniProt Synonym Gene Names	HER4; 4ICD; E4ICD
UniProt Entry Name	ERBB4_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/erbb4-recombinant-protein-hek293/257418>