

HER4 / ErbB4 active protein

Recombinant Rat HER4 / ErbB4 Protein (His tag)

CATALOG #
AAA173601

HOST
HEK293 cells

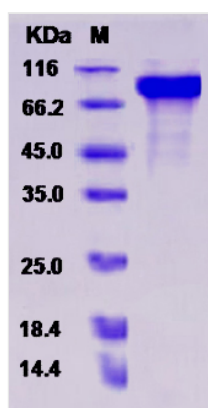
PRODUCT SYNONYMS

HER4 / ErbB4; Recombinant Rat HER4 / ErbB4 Protein (His tag); ERBB4; HER4 / ErbB4 active protein

PRODUCT SPECIFICATIONS

Host	HEK293 cells
Purity/Purification	> 95 % as determined by SDS-PAGE
Form/Format	Lyophilized from sterile PBS, pH7.4, 5% trehalose, 5% mannitol, 0.01% Tween 80
Sequence Length	1292
Predicted N Terminal	Gln 26
Source	Rat
Bio-Activity	Measured by its binding ability in a functional ELISA. Immobilized rat ERBB4-His at 10 ug/mL (100 uL/well) can bind biotinylated human NRG1, the EC50 of biotinylated human NRG1 is 0.68-1.6 ug /mL.
Endotoxin	< 1.0 EU per ug of the protein as determined by the LAL method.
Reconstitution	It is recommended that sterile water (200 ul) be added to the vial to prepare a stock solution of 0.25 mg/mL. Concentration is measured by UV-Vis.
Preparation and Storage	Store it under sterile conditions at -20 degree C to -80 degree C. It is recommended that the protein be aliquoted and be used as soon as possible. Avoid repeated freeze-thaw cycles.

IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for HER4 / ErbB4 active protein	Background: ERBB4 is a single-pass type I membrane protein with multiple cysteine rich domains, a transmembrane domain, a tyrosine kinase domain, a phosphotydylinositol-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. Description: A DNA sequence encoding the rat ERBB4 (AAQ77349.1) (Met1-Pro651) was expressed with a polyhistidine tag at the C-terminus.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	34597585
NCBI GeneID	59323
Molecular Weight	The recombinant rat ERBB4 comprises 637 amino acids and predicts a molecular mass of 71.3 kDa. The apparent molecular mass of the recombinant protein is approximately 75-95 kDa in SDS-PAGE under reducing conditions due to glycosylation.
NCBI Official Full Name	receptor tyrosine kinase isoform JMa cyt2
NCBI Official Synonym Full Names	erb-b2 receptor tyrosine kinase 4
NCBI Official Symbol	ErbB4
NCBI Protein Information	receptor tyrosine-protein kinase erbB-4
UniProt Protein Name	Receptor tyrosine-protein kinase erbB-4
UniProt Gene Name	ErbB4
UniProt Synonym Gene Names	Tyro-2; 4ICD; E4ICD

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.