

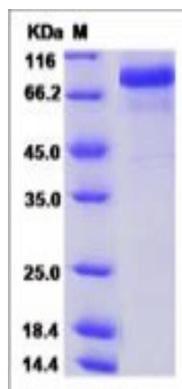
ERBB4

Recombinant Human, Rhesus HER4 / ErbB4 (His Tag)

Catalog No.	CRH466A-His CRH466B-His	Quantity:	50 µg 100 µg
Alternate Names:	Receptor tyrosine-protein kinase erbB-4, Proto-oncogene-like protein c-ErbB-4, Tyrosine kinase-type cell surface receptor HER4 p180erbB4		
Description:	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.		
UniProt ID:	Q15303		
Accession Number:	NP_005226.1		
Protein Construction:	A DNA sequence encoding the human ERBB4 (Met1-Arg649) was expressed with a C-terminal polyhistidine tag. Human and Rhesus ERBB4 sequences are identical.		
Source:	Baculovirus-Insect Cells		
Formulation:	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.		
Molecular Weight:	The recombinant human ERBB4 comprises 635 amino acids and has a predicted molecular mass of 71.1 kDa. The apparent Mr of the protein is ~92 kDa in SDS-PAGE under reducing conditions.		
Purity:	> 95 % as determined by SDS-PAGE		
Endotoxin Level:	< 1.0 EU per µg of the protein as determined by the LAL method.		
Biological Activity:	In a functional ELISA, immobilized human ERBB4-His (1-649) at 10 µg/ml (100 µl/well) can bind biotinylated human NRG1, The EC50 of biotinylated human NRG1 is 0.49-1.13 µg/ml.		
Predicted N-terminal:	Gln 26		

- Reconstitution:** **Centrifuge vial prior to opening.** Add sterile distilled water to a concentration of 0.1 mg/mL and gently pipette the solution up and down the sides of the vial. **DO NOT VORTEX.** Allow several minutes for complete reconstitution.
- Storage & Stability:** Stable for up to 1 year from date of receipt at -20°C to -80°C. After reconstitution, store working aliquots at -20°C to -80°C. **Avoid repeated freeze-thaw cycles.**

SDS-PAGE



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