

## Recombinant Human/Rhesus HER4/ErbB4 Protein (His Tag)

Catalog Number: PKSH031648

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

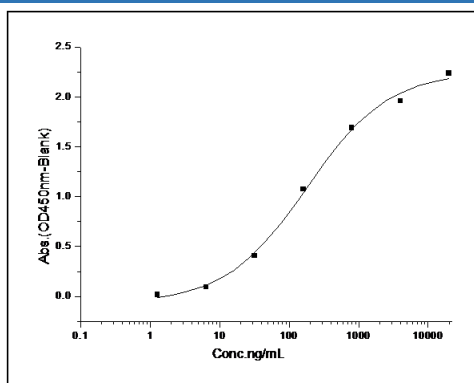
### Description

<b>Species</b>	Human
<b>Source</b>	HEK293 Cells-derived Human HER4/ErbB4 protein Met 1-Arg649, with an C-terminal His
<b>Calculated MW</b>	71.1 kDa
<b>Observed MW</b>	102 kDa
<b>Accession</b>	NP_005226.1
<b>Bio-activity</b>	Immobilized human ErbB4-His at 10 µg/ml (100 µl/well) can bind biotinylated human NRG1 , The EC <sub>50</sub> of biotinylated human NRG1 is 0.4-0.92 µg/ml.

### Properties

<b>Purity</b>	> 85 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile PBS, pH7.4 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



Measured by its binding ability in a functional ELISA.

Immobilized human ErbB4-His at 10 µg/ml (100 µl/well) can bind biotinylated human NRG1 (Cat: PKSH031068)2, The EC<sub>50</sub> of biotinylated human NRG1 (Cat: PKSH031068)2 is 0.4-0.92 µg/ml.

### Background

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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.

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