

RP00120

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# Recombinant Human ErbB-4/HER4 Protein

Catalog No.: RP00120

Recombinant

## Sequence Information

Species	Gene ID	Swiss Prot
Human	2066	Q15303

### Tags

C-hFc&His

### Synonyms

ALS19;HER4;p180erbB4;ERBB4;HER4/ErbB4

## Background

This protein is a member of the Tyr protein kinase family and the epidermal growth factor receptor subfamily. It 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. The protein binds to and is activated by neuregulins and other factors and induces a variety of cellular responses including mitogenesis and differentiation. Multiple proteolytic events allow for the release of a cytoplasmic fragment and an extracellular fragment. Mutations in this gene have been associated with cancer. Alternatively spliced variants which encode different protein isoforms have been described; however, not all variants have been fully characterized.

## Product Information

Source	Purification
HEK293 cells	> 97% by SDS-PAGE.

### Endotoxin

< 0.1 EU/μg of the protein by LAL method.

### Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4. Contact us for customized product form or formulation.

### Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize freeze-thaw cycles.

## Basic Information

### Description

Recombinant Human ErbB-4/HER4 Protein is produced by HEK293 expression system. The target protein is expressed with sequence (Gln26-Arg649) of human Her4/ErbB4 (Accession #NP\_005226.1) fused with an Fc, 6×His tag at the C-terminus.

### Bio-Activity

Measured by its binding ability in a functional ELISA. Immobilized Recombinant Human NRG1-beta1 at 2 μg/mL (100 μL/well) can bind Recombinant Human HER4/ErbB4, the EC<sub>50</sub> of HER4/ErbB4 is 20.99 ng/mL. Measured by its binding ability in a functional ELISA. Immobilized Human ErbB4/Her4 Antibody at 1 μg/mL (25 μL/well) can bind Human ErbB4/Her4 with a linear range of 0.46-14.6 ng/mL.

### Storage

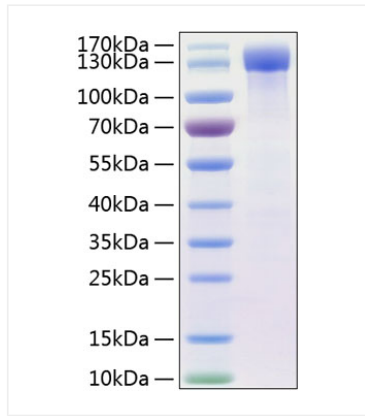
Store the lyophilized protein at -20°C to -80 °C for long term. After reconstitution, the protein solution is stable at -20 °C for 3 months, at 2-8 °C for up to 1 week. Avoid repeated freeze/thaw cycles.

## Contact

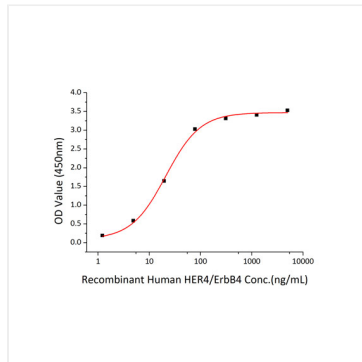


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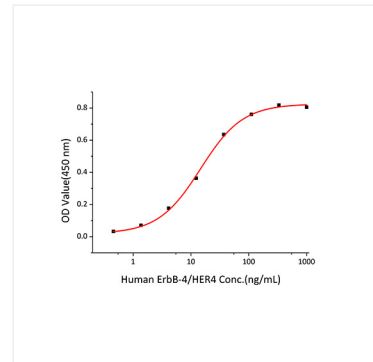
## Validation Data



Recombinant Human ErbB-4/HER4 Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 130-140 kDa.



Immobilized Recombinant Human NRG1-beta1 at 2 µg/mL (100 µL/well) can bind Recombinant Human HER4/ErbB4, the EC<sub>50</sub> of HER4/ErbB4 is 20.99 ng/mL.



Immobilized Human ErbB4/Her4 Antibody at 1 µg/mL (25 µL/well) can bind Human ErbB4/Her4 with a linear range of 0.46-14.6 ng/mL.