Catalog # ER4-H5251



#### Synonym

HER4,ErbB4,MGC138404,p180erbB4

### Source

Human ErbB4, Fc Tag(ER4-H5251) is expressed from human 293 cells (HEK293). It contains AA Gln 26 - Pro 651 (Accession # <u>Q15303-1</u>). Predicted N-terminus: Gln 26

## **Molecular Characterization**

ErbB4(Gln 26 - Pro 651) Fc(Pro 100 - Lys 330) Q15303-1 P01857

This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 96.0 kDa. The protein migrates as 90-106 kDa and 116-120 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

### Endotoxin

Less than 1.0 EU per  $\mu$ g by the LAL method / rFC method.

## Purity

>90% as determined by SDS-PAGE.

### Formulation

Lyophilized from 0.22  $\mu$ m filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

### Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

#### Storage

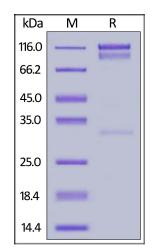
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- $-70^{\circ}$ C for 3 months under sterile conditions after reconstitution.

# **SDS-PAGE**



Human ErbB4, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

#### **Bioactivity-ELISA**



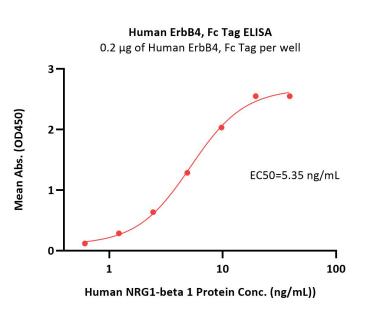
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4/18/2025

# Human ErbB4 / Her4 Protein, Fc Tag

Catalog # ER4-H5251





Immobilized Human ErbB4, Fc Tag (Cat. No. ER4-H5251) at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind Human NRG1-beta 1 Protein with a linear range of 0.6-10 ng/mL (Routinely tested).

#### Background

Receptor tyrosine-protein kinase erbB-4 (ErbB4), also known as Her4, is a single-pass type I transmembrane glycoprotein that is a member of the ErbB family of tyrosine kinase receptors. ErbB family members serve as receptors for the epidermal growth factor (EGF) family of growth factors. ErbB4 is expressed in normal skeletal muscle, heart, pituitary, brain and several breast carcinomas. ERBB4 contains multiple furin-like cysteine rich domains, a tyrosine kinase domain, a phosphotidylinositol-3 kinase binding site and a PDZ domain binding motif. The protein binds to and is activated by neuregulins-2 and -3, heparin-binding EGF-like growth factor and betacellulin. Ligand binding 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. ErbB4 appears to play important roles in neuronal development, development of the heart and cancer. ERBB4 has been shown to interact with: DLG4, NRG1, STAT5A, and YAP1. Mutations in this gene have been associated with cancer. Other single-nucleotide polymorphisms and a risk haplotype have been linked to schizophrenia.



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