

## Recombinant Human ERBB4 protein, Fc-tagged

Cat. No. ERBB4-358H Lot. No. (See product label)

### SPECIFICATION

**Product Overview** Recombinant Human ERBB4 protein (Gln26-Pro651), fused to human IgG1 Fc tag at C-terminus, was expressed in human 293 cells (HEK293).

**Species** Human

**Source** HEK293

**ProteinLength** 626

#### Description

Receptor tyrosine-protein kinase erbB-4 (ErbB4) is 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 phosphatidylinositol-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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<b>Form</b>	Lyophilized from 0.22 um filtered solution in PBS, pH7.4, 10% trehalose.
<b>Molecular Mass</b>	The protein has a calculated MW of 96 kDa. The protein migrates as 122-132 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.
<b>Endotoxin</b>	Less than 1.0 EU per ug by the LAL method.
<b>Purity</b>	>90% as determined by SDS-PAGE.
<b>Storage</b>	For long term storage, the product should be stored at lyophilized state at -20 centigrade or lower. Please avoid repeated freeze-thaw cycles. This product is stable after storage at: -20 centigrade to -70 centigrade for 12 months in lyophilized state; -70 centigrade for 3 months under sterile conditions after reconstitution.
<b>Reconstitution</b>	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 ug/ul. Centrifuge the vial at 4°C before opening to recover the entire contents.

## GENE INFORMATION

<b>Gene Name</b>	ERBB4
<b>Official Symbol</b>	ERBB4
<b>Synonyms</b>	ERBB4; v-erb-a erythroblastic leukemia viral oncogene homolog 4 (avian); v erb a avian erythroblastic leukemia viral oncogene homolog like 4; receptor tyrosine-protein kinase erbB-4; proto-oncogene-like protein c-ErbB-4; tyrosine kinase-type cell surface receptor HER4; avian erythroblastic leukemia viral (v-erb-b2) oncogene homolog 4; HER4; p180erbB4; MGC138404

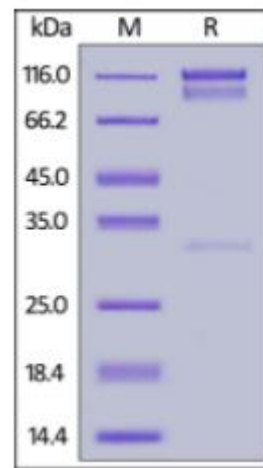
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<b>Gene ID</b>	2066
<b>mRNA Refseq</b>	NM_001042599
<b>Protein Refseq</b>	NP_001036064
<b>MIM</b>	600543
<b>UniProt ID</b>	Q15303

**SDS-PAGE of  
ERBB4-358H**



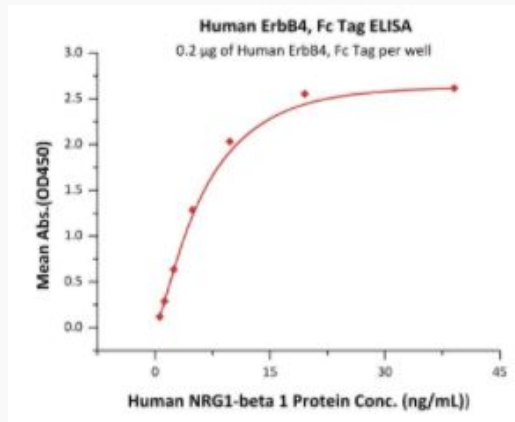
Human ErbB4, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

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**Bioactivity-ELISA of  
ERBB4-358H**



Immobilized Human ErbB4, Fc Tag at 2 µg/mL (100 µL/well) can bind Human NRG1-beta 1 Protein with a linear range of 0.6-10 ng/mL (Routinely tested).

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