

Human CellExp™ ErbB4/HER4, human recombinant

CATALOG #:	7401-10	10 µg
	7401-50	50 µg
ALTERNATE NAMES:	HER4, ErbB4, MGC138404, p180erbB4	
SOURCE:	HEK 293 cells (Glu 26 - Pro 651)	
PURITY:	≥ 95% by SDS-PAGE gel	

MOL. WEIGHT: This protein is fused with 6xhis tag at the C-terminus and has a calculated MW of 70.6 kDa expressed. The predicted N-terminal is Glu26. Protein migrates as 95-110 kDa in reduced SDS-PAGE due to glycosylation.

ENDOTOXIN LEVEL: <1 EU/µg by LAL method

FORM: Lyophilized

FORMULATION: Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Generally 5-8% Mannitol or trehalose is added as a protectant before lyophilization.

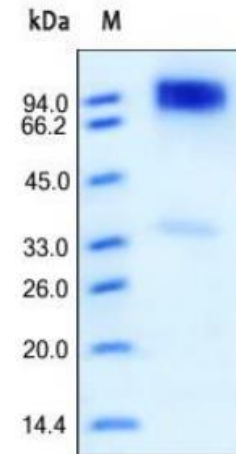
STORAGE CONDITIONS: Store at -20°C. After reconstitution, aliquot and store at -20°C and use within 3 months. Avoid repeated freezing and thawing cycles.

RECONSTITUTION: Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50 µg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

DESCRIPTION: 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 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.

BIOLOGICAL ACTIVITY: Measured by its ability to inhibit the biological activity of Neuregulin-1-β1 on MCF-7 human breast cancer cells, in the presence of 10 ng/mL of Recombinant Human NRG1-β1/HRG1-β1 Extracellular Domain. The ED₅₀ for this effect is typically 0.2-2.5 µg/mL.



Human recombinant HER4/ErbB4

RELATED PRODUCTS:

- Human CellExp™ HER1/ErbB1, human recombinant (**Cat. No. 7396-10**)
- Human CellExp™ HER2/ErbB2, human recombinant (**Cat. No. 7397-10, -50**)
- Human CellExp™ HER3/ErbB3, human recombinant (**Cat. No. 7400-10, -50**)
- EGF Receptor, human recombinant (**Cat. No. 7135-10, -50**)
- ErbB4/HER4 (His Tagged), Human Recombinant (**Cat. No. 7773-5**)
- HER2, Active (**Cat. No. 7762-5, -100**)
- HER2/ErbB2 Antibody (**Cat. No. 3783-100**)

FOR RESEARCH USE ONLY! Not to be used in humans.