

Human CellExp ErbB4/HER4, human recombinant protein HER4, ErbB4, MGC138404, p180erbB4 Catalog # PBV11024r

### Specification

## Human CellExp ErbB4/HER4, human recombinant protein - Product info

Primary Accession Calculated MW

#### <u>Q15303</u>

2066

ErbB4

This protein is fused with 6×his 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. KDa

### Human CellExp ErbB4/HER4, human recombinant protein - Additional Info

Gene ID Gene Symbol **Other Names** HER4, ErbB4, MGC138404, p180erbB4

Gene Source Source Assay&Purity Assay2&Purity2 Recombinant Results Human HEK293 cells SDS-PAGE; ≥95% N/A; Yes 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.

#### Target/Specificity ErbB4

### Application Notes

Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50  $\mu$ g/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.

Format Lyophilized

Storage

-20°C; Lyophilized from 0.22  $\mu$ m filtered solution in PBS, pH7.4. Generally 5-8% Mannitol or trehalose is added as a protectant before lyophilization.



# Human CellExp ErbB4/HER4, human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# Human CellExp ErbB4/HER4, human recombinant protein - Images

# Human CellExp ErbB4/HER4, human recombinant protein - 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.

## Human CellExp ErbB4/HER4, human recombinant protein - References

Plowman G.D., et al. Proc. Natl. Acad. Sci. U.S.A. 90:1746-1750(1993). Elenius K., et al.J. Biol. Chem. 272:26761-26768(1997). Totoki Y., et al.Submitted (MAR-2005) to the EMBL/GenBank/DDBJ databases. Culouscou J.-M., et al.J. Biol. Chem. 268:18407-18410(1993). Plowman G.D., et al.Nature 366:473-475(1993).