

ErbB4/HER4 (His Tagged), Human recombinant protein
ErbB4/HER4 (His Tagged), Human Recombinant
Catalog # PBV11344r**Specification**

ErbB4/HER4 (His Tagged), Human recombinant protein - Product infoPrimary Accession
Calculated MW[Q15303](#)

The recombinant human ErbB4/Fc is a disulfide-linked homodimeric protein after proteolytic removal of the signal peptide. The reduced monomer consists of 871 amino acids with a predicted molecular mass of 97.5 kDa. As a result of glycosylation, the rh ErbB4/Fc monomer migrates as approximately 125-135 kDa band in SDS-PAGE under reducing conditions. KDa

ErbB4/HER4 (His Tagged), Human recombinant protein - Additional InfoGene ID
Gene Symbol
Other Names
HER4, MGC138404, p180erbB4, ERBB42066
ERBB4Gene Source
Source
Assay&Purity
Assay2&Purity2
Recombinant
Target/Specificity
ERBB4Human
Human
SDS-PAGE; ≥95%
HPLC;
Yes**Format**
Lyophilized**Storage**

-80°C; Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose and mannitol are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA.

ErbB4/HER4 (His Tagged), Human recombinant protein - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)

- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

ErbB4/HER4 (His Tagged), Human recombinant protein - Images**ErbB4/HER4 (His Tagged), Human recombinant protein - Background**

ErbB4, also known as Her4, is a member of the tyrosine kinase receptors (RTK) and the epidermal growth factor receptor (EGFR) subfamily, and appears to play important roles in differentiation, development and certain carcinomas. It is a single transmembrane-span type I glycoprotein structurally consisting of multiple cysteine rich domains, a transmembrane domain, a tyrosine kinase domain, a phosphatidylinositol-3 (PI-3) kinase binding site and a PDZ domain binding motif. However, the last two domains are absent in one of the two naturally occurring ErbB4 isoforms, ErbB4 CYT-2. ErbB4 ligands include the neuregulins, betacellulin and heparin-binding EGF-like growth factor (HB-EGF). Typically, heterodimerization of ErbB4 with ErbB2 forms the high affinity receptor complex, and subsequently transmit cellular signals by activating downstream src homology-2 (SH2) and phosphotyrosine binding (PTB) domain-containing signaling molecules. ErbB4 undergoes sequential processing by TNF- α converting enzyme (TACE) and presenilin-dependent gamma-secretase to release the ErbB4 ICD (4ICD) with the NLS sequence which is essential for nuclear accumulation of 4ICD. It has been shown that the ligand-induced proteolytic process of ErbB4 results in the accumulation of 4ICD and cytochrome c efflux, and directly couples a cell surface signal to the tumor cell mitochondrial apoptotic pathway. Accordingly, in contrast to the other three members of the EGFR family, ErbB4 expression seems to be selectively lost in tumors with aggressive phenotypes.

ErbB4/HER4 (His Tagged), Human recombinant protein - References

Plowman G.D., et al. Proc. Natl. Acad. Sci. U.S.A. 90:1746-1750(1993).
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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).