

## Recombinant Human Tyrosine Kinase ErbB-3 (rh ErbB3)

**Synonyms:** Receptor tyrosine-protein kinase erbB-3, c-erbB3, Tyrosine kinase-type cell surface receptor HER3.

**Introduction:** ErbB3 is a type I membrane 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. Among ErbB family members, ErbB3 is unique in that it contains a defective kinase domain. ErbB3 is expressed in keratinocytes, melanocytes, skeletal muscle cells, embryonic myoblasts and Schwann cells. Monomeric ErbB3 serves as a low affinity receptor for the heregulins (HRG). ErbB3 can induce specific antibody production in vivo and hence to inhibit tumor cell growth. ErbB-3 can be used to treat early, medium and advanced or post-operative breast cancer.

**Description:** Recombinant human Tyrosine Kinase ErbB3 (extracellular domain) produced in E.Coli is a single, non-glycosylated, fusion polypeptide chain containing Thyrodoxin Tag and His tag. The protein consists of 190 amino acids (Met1- Cys190) and having a total molecular mass of 34 kDa. The ErbB3 is purified by proprietary chromatographic techniques.

**Source:** *Escherichia Coli*

**Physical Appearance:** A white semitransparent suspension at a concentration of 1mg/ml.

**Formulation:** Each mg protein contains 1 mg aluminum hydroxide, 10mM arginine, 10mM sodium chloride, 20mM sodium phosphate buffer and 5mM potassium phosphate.

**Stability:** Lyophilized rh ErbB3 although stable at 14°C 1weeks, should be stored desiccated below -18° C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

**Purity:** Greater than 95.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

**Amino Acid Sequence:**

MRANDALQVL GLLFSLARGS EVGNSQAVCP GTLNGLSVTG DAENQYQTLY KLYERCEVVM GNLEIVLTGH  
NADLSFLQWI REVTGYVLA MNEFSTLPLP NLRVVRGTQV YDGKFAIFVM LNYNTNSSHA LRQLRLTQLT  
EILSGGVYIE KNDKLCHMDT IDWRDIVRDR DAEIVVKDNG RSCPPCHEVC

**Biological Activity:** Measured by its ability to postpone tumor emerge time of spontaneous breast cancer in FVB/N transgenic mice and inhibit the development of tumor, effectively inhibit the growth of in situ transplanted breast cancer in FVB/N transgenic mice.

This material is offered for **research only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	5 µg	Cat.N°	11348010
<i>medium</i>	20 µg	Cat.N°	11348014

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