



## User Manual

**ErbB3 Fragment (ErbB3-f) (Human)**

**Cat. No. HEOPP-05081**

**Description:**

ErbB3, also called Her3 (human epidermal growth factor receptor 3), 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). rhErbB3-f is a recombinant genetic engineering product which expressed in E. Coli. RhErbB3-f can induce specific antibody production in vivo, hence to inhibit tumor cell growth. The product can be used to treat early, medium and advanced or post-operative breast cancer patients with over-expression of ErbB2. According to its mechanism of action, rhErbB3-f is classified into therapeutic cancer vaccine.

**Source:**

*Escherichia coli*

**Unit:**

5 µg

**Formulation:**

A white, semitransparent suspension, the normal content of each vial is 1 mg of ErbB3-f, 1mg aluminum hydroxide and small amount of arginine, sodium chloride, sodium phosphate, and potassium phosphate.

**Storage:**

This liquid suspension is stable for several months at 0-4°C, but should be kept at -20°C for long term storage. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles.

**Molecular Weight:**

Approximately 34 kDa, a single non-glycosylated fusion polypeptide chain, containing 171 amino acids (Ser20- Cys190) with N-terminus Thioredoxin Tag and His tag.

**Endotoxin:**

Less than 1 EU/ $\mu$ g of ErbB3-f as determined by LAL method.

**Usage:**

This material is offered by Cyagen Biosciences for research, laboratory or further evaluation purposes. FOR RESEARCH USE ONLY. NOT INTENDED FOR ANY ANIMAL OR HUMAN THERAP EUTIC OR DIAGNOSTIC USE.

**Biological Activity:**

The specific activity is determined by postponing tumor emerge time of spontaneous breast cancer in FVB/N transgenic mice and inhibiting the development of tumor, effectively inhibit the growth of in situ transplanted breast cancer in FVB/N transgenic mice.

**Physical Appearance:**

A white semitransparent suspension at a concentration of 1 mg/mL.

**AA Sequence:**

SEVGN SQAVC PGT LNGLSVT GDAENQYQTL YKLYERCEVV MGNLEIVLTG  
HNADLSFLQW IREVTGYVLV AMNEFSTLPL PNLRVVRGTQ VYDGKFAIFV  
MLNYNTNSSH ALRQLRLTQL TEILSGGVYI EKNDKLCHMD TIDWRDIVRD  
RDAEIVVKDN GRSCPPCHEV C

**Dilution:**

It is recommended that sterile phosphate-buffered saline containing 1 mg aluminum hydroxide be added to the vial to prepare a stock solution.

**Purity:**

> 95% by SDS-PAGE and HPLC analyses.

Material Safety Data Sheets (MSDSs) are available upon request.

The Certificate of Analysis (COA), which provides detailed quality control information for each product, is also available at the Cyagen website.

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