83103 Avenue 48, Ste.1B #204 Coachella, CA 92236 USA Phone: +1.6268339877 Email: info@cali-bio.com

# **Product Datasheet**

**Product Name** Tyrosine Kinase ErbB-3 Human Recombinant

Cata No CB500897
Source Escherichia Coli.

Synonyms Receptor tyrosine-protein kinase erbB-3, EC 2.7.10.1, c-erbB3, Tyrosine kinase-type

cell surface receptor HER3, ErbB3, HER3.

## **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). ErbB3 can induce specific antibody production in vivo, hence to inhibit tumor cell growth. ErbB-3 can be used to treat early, medium and advanced or post-operative breast cancer with over-expression of ErbB2. According to its mechanism of action, ErbB3 is classified as a therapeutic for cancer.

Tyrosine Kinase ErbB3 Human Recombinant (extracellular domain) (HER3) 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.

### **Physical Appearance**

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

# **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.

## **Purity**

Greater than 95.0% as determined by:

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

#### **Formulation**

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

#### **Stability**

ErbB3 although stable at  $4^{\circ}$ C for 1 week, should be stored desiccated below -18 $^{\circ}$ C.

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please prevent freeze-thaw cycles.

#### Sequence

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

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