

Product: Tyrosine Kinase ErbB-3(ErbB3), human, recombinant
Catalog #: 12-4345
Amount: 10 µg

DESCRIPTION:

Recombinant human Tyrosine Kinase ErbB-3 (rHuErbB3)
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. Recombinant Human extracellular domain Tyrosine kinase ErbB3 (HER3) produced in E.Coli is a single, non-glycosylated, fusion polypeptide chain containing 190 amino acids (Met1- Cys190) and having a total molecular mass of 34 kDa. rHuErbB3 is purified by proprietary chromatographic techniques. *Escherichia Coli* expression system

SOURCE:**PURITY:**

> 95%, as determined by:
(a) Analysis by RP-HPLC and anion-exchange FPLC
(b) Analysis by reducing and non-reducing SDS-PAGE Silver Stained gel

ENDOTOXIN:**DIMERS & AGGREGATES:****PROTEIN CONTENT:**

< 0.1 ng/µg (IEU/µg) of rHuErbB3
< 1% as determined by silver stained SDS-PAGE gel analysis
Protein quantitation was carried out by 2 independent methods:
- UV spectroscopy at 280 nm
- Analysis by RP-HPLC, using a standard solution of ErbB3 as a Reference Standard

FORM:

Purified, in 1mg aluminum hydroxide 10mM arginine, 10mM sodium chloride, 20mM sodium phosphate buffer and 5mM potassium phosphate, 0.1 % BSA
-20°C (aliquot), avoid freezing and thawing cycles

STORAGE:**BIOLOGICAL ACTIVITY:**

rHuErbB3 is fully biologically active when compared to standard.
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.

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