Rhesus HER3 / ErbB3 Protein (Fc Tag)

Catalog Number: **90043-K02H**

General Information

Gene Name Synonym:

ERBB3

Protein Construction:

A DNA sequence encoding the Rhesus (Macaca mulatta) ErbB3 (XP_001113953.2) extracellular domain (Met 1-Thr 643) was fused with the Fc region of human IgG1 at the C-terminus.

Source: Rhesus

Expression Host: HEK293 Cells

QC Testing

Purity: > 90 % as determined by SDS-PAGE

Bio Activity:

Measured by its binding ability in a functional ELISA. Immobilized Human NRG1 Alpha His (Cat:13499-H08H) at 2 μg/ml (100 μl/well) can bind Rhesus HER3/ERBB3 hFc(Cat:90043-K02H), the EC_{50}?of Rhesus HER3/ERBB3 hFc is 250-800 ng/mL.

Endotoxin:

< 1.0 EU per μg of the protein as determined by the LAL method

Predicted N terminal: Ser 20

Molecular Mass:

The recombinant Rhesus ErbB3/Fc is a disulfide-linked homodimeric protein. The reduced monomer consists of 865 amino acids and predicts a molecular mass of 95.7 kDa. As a result of glycosylation, rhesus ErbB3/Fc monomer migrates as an approximately 130-140 kDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Stability & Storage:
Samples are stable for twelve months from date of receipt at -20℃ to -80℃.

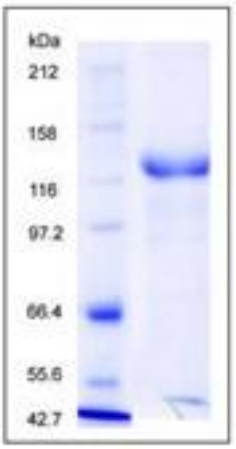
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

ErbB3, also known as Her3(human epidermal growth factor receptor3), is a member of the epidermal growth factor receptor (EGFR) family of receptor tyrosine kinases. This membrane-bound glycoprotein has a neuregulin binding domain but has not an active kinase domain., and therefore can not mediate the intracellular signal transduction through protein phosphorylation. However, its heterodimer with ErbB2 or other EGFR members responsible for tyrosine phosphorylation forms a receptor complex with high affinity, and initiates the related pathway which lead to cell proliferation or differentiation. ErbB3 has been shown to implicated in numerous cancers, including prostate, bladder, and breast tumors. This protein has different isoforms derived from alternative splicing variants, and among which, the secreted isoform lacking the intermembrane region modulates the activity of membrane-bound form.

References

1.Kraus M.H., *et al.*,(1989), Isolation and characterization of ERBB3, a third member of the ERBB/epidermal growth factor receptor family: evidence for overexpression in a subset of human mammary tumors. Proc. Natl. Acad. Sci. U.S.A. 86:9193-9197. 2.Plowman G.D., *et al.*, (1990), Molecular cloning and expression of an additional epidermal growth factor receptor-related gene.Proc. Natl. Acad. Sci. U.S.A. 87:4905-4909. 3.Katoh M., *et al.*,(1993), c-erbB3 gene encodes secreted as well as transmembrane receptor tyrosine kinase.Biochem. Biophys. Res. Commun. 192:1189-1197.