General Information

Gene Name Synonym:
ERBB2

Protein Construction:
A DNA sequence encoding the Rhesus ErbB2 (XP_001090430.1) extracellular domain (Met 1-Thr 652) 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 rhesus Erbb2-Fc at 2.5 µg/ml (100 µl/well) can bind Herceptin with a linear range of 6.4-160 ng/ml.

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

Stability:
Samples are stable for up to twelve months from date of receipt at -70 ºC

Predicted N terminal: Gin 24

Molecular Mass:
The recombinant Rhesus ErbB2/Fc chimera is a disulfide-linked homodimer. The reduced monomer consists of 870 amino acids and predicts a molecular mass of 96.3 kDa. As a result of glycosylation, rhesus ErbB2/Fc monomer migrates as an approximately 130 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

Storage:
Store it under sterile conditions at -20 ºC to -80 ºC 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

Epidermal growth factor receptor 2 (HER2), also known as ErbB2, NEU, and CD340, is a type I membrane glycoprotein, and belongs to the epidermal growth factor (EGF) receptor family. HER2 protein cannot bind growth factors due to the lacking of ligand binding domain of its own and autoinhibited constitutively. However, HER2 forms a heterodimer with other ligand-bound EGF receptor family members, therefore stabilizes ligand binding and enhances kinase-mediated activation of downstream molecules. HER2 plays a key role in development, cell proliferation and differentiation. HER2 gene has been reported to associate with malignancy and a poor prognosis in numerous carcinomas, including breast, prostate, ovarian, lung cancers and so on.

References