

Rat HER2 / ErbB2 Protein

Catalog Number: 80079-RCCH



Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

ERBB2

Protein Construction:

A DNA sequence encoding the rat ErbB2 (AAH61863.1) extracellular domain (Met 4-Thr 656) was expressed and purified, with seven additional amino acids (ALEVLFQ) at the C-terminus.

Source: Rat

Expression Host: HEK293 Cells

QC Testing

Purity: > 92 % as determined by SDS-PAGE

Bio Activity:

1. Measured by its binding ability in a functional ELISA. 2. Immobilized rat ErbB2 (Cat:80079-RCCH) at 10µg/mL (100µL/well) can bind herceptin, the EC₅₀ of herceptin is 30-90ng/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 °C

Predicted N terminal: Thr 26

Molecular Mass:

The recombinant rat ErbB2/Fc is a disulfide-linked homodimer. The reduced monomer comprises 638 amino acids and predicts a molecular mass of 70.6 kDa. The apparent molecular mass of the rat ErbB2 is approximately 95-105 kDa in SDS-PAGE under reducing conditions due to glycosylation.

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:

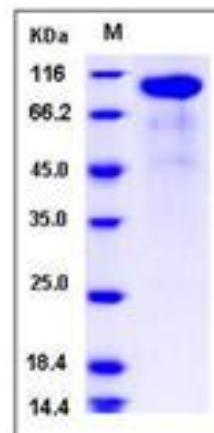
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

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

3.Krawczyk N, *et al.* (2009) HER2 status on persistent disseminated tumor cells after adjuvant therapy may differ from initial HER2 status on primary tumor. *Anticancer Res.* 29(10): 4019-24.

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