

Synonym

ERBB2,CD340,HER-2/neu,HER2,MLN19,NEU,NGL,TKR1

Source

Human Her2 (23-450), Fc Tag (HE2-H525x) is expressed from human 293 cells (HEK293). It contains AA Thr 23 - Ile 450 (Accession # P04626-1).

Predicted N-terminus: Thr 23

Molecular Characterization

Her2(Thr 23 - Ile 450) P04626-1	Fc(Pro 100 - Lys 330) P01857
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This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 73.8 kDa. The protein migrates as 95-100 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Human Her2 (23-450), Fc Tag does not contain Herceptin MAb binding domain.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in Tris with Glycine, Arginine and NaCl, pH7.5. Normally trehalose is added as protectant before lyophilization.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

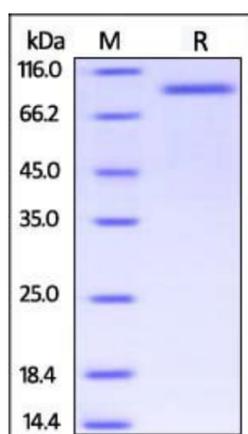
Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

Human Her2 (23-450), Fc Tag on SDS-PAGE under reducing (R) condition.

The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Background

Human Epidermal growth factor Receptor 2 (HER2) is also called ERBB2, HER-2,HER-2 /neu, NEU, NGL,TKR1 and c-erb B2,and is a protein giving higher aggressiveness in breast cancers. It is a member of the ErbB protein family, more commonly known as the epidermal growth factor receptor family. HER2 is a cell membrane surface-bound receptor tyrosine kinase and is normally involved in the signal transduction pathways leading to cell growth and differentiation. HER2 is thought to be an orphan receptor, with none of the EGF family of ligands able to activate it. Approximately 30% of breast cancers have an amplification of the HER2

gene or overexpression of its protein product. Overexpression of this receptor in breast cancer is associated with increased disease recurrence and worse prognosis. HER2 appears to play roles in development, cancer, communication at the neuromuscular junction and regulation of cell growth and differentiation .

References

- (1) [Kanai, Y. et al., 1995, Biochem. Biophys. Res. Commun. 208:1067.](#)
- (2) [Codony-Seeervat, J. et al., 1999, Cancer Res. 59: 1196-1201.](#)
- (3) [Tzahar, E. et al., 1998, Biochim. Biophys. Acta. 1377: 25-37.](#)
- (4) [Kermit, L. et al., 1999, J. Biol. Chem. 274: 5263-5266.](#)
- (5) [Hellyer, N.J. et al., 2001, J. Biol. Chem. 276:42153.](#)
- (6) [Daly, R.J., 1999, Growth Factors 16:255.](#)

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.