

**Synonym**

ERBB3,HER3,LCCS2,MDA-BF-1,MGC88033,c-erbB3,erbB3-S,p180-ErbB3,p45-sErbB3,p85-sErbB3

**Source**

Mouse ErbB3, His Tag(ER3-M52H5) is expressed from human 293 cells (HEK293). It contains AA Ser 20 - His 641 (Accession # [Q61526-1](#)).

Predicted N-terminus: Ser 20

**Molecular Characterization**

ErbB3(Ser 20 - His 641)  
Q61526-1 Poly-his

This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 70.4 kDa. The protein migrates as 80-90 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

**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 PBS, pH7.4 with trehalose as protectant.

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**

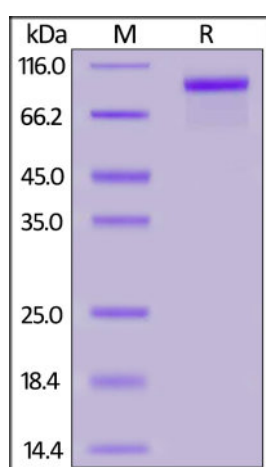
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

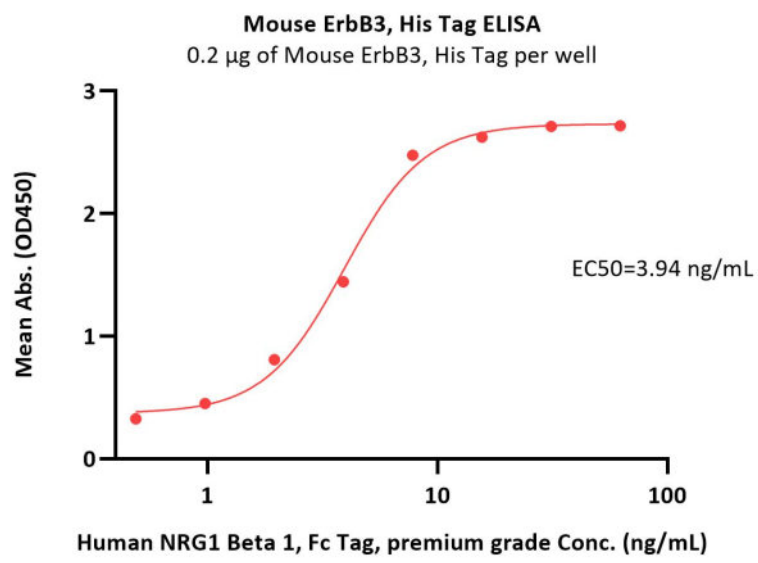
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

**SDS-PAGE**



Mouse ErbB3, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

**Bioactivity-ELISA**



Immobilized Mouse ErbB3, His Tag (Cat. No. ER3-M52H5) at 2 µg/mL (100 µL/well) can bind Human NRG1 Beta 1, Fc Tag, premium grade (Cat. No. NR1-H5268) with a linear range of 0.5-8 ng/mL (QC tested).

## Background

ErbB3, also known as Her3 (human epidermal growth factor receptor 3), 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. It therefore can bind the ligand but cannot mediate the intracellular signal transduction through protein phosphorylation. However, it does form heterodimers with ErbB2 or other EGFR members responsible for tyrosine phosphorylation to give a receptor complex and initiate the related pathway, which lead to cell proliferation or differentiation. Overexpression of this protein has been reported 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.

## Clinical and Translational Updates

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.