Recombinant Human ErbB3 (HER3) Protein (His Tag)

Catalog Number: ErbB3-H1001



Gene Name

HER3; FERLK; LCCS2; VSCN1; ErbB-3; c-erbB3; erbB3-S; MDA-BF-1; c-erbB-3; p180-ErbB3; p45-sErbB3; p85-sErbB3

Source

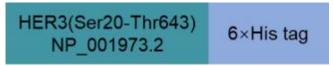
This product is recombinant human ErbB3 (HER3) expressed in human 293 cells (HEK293). It comprises amino acids Ser20-Thr643 (NP_001973.2) corresponding to the extracellular domain of ErbB3.

The predicted N-terminus is Ser20.

Molecular Characterization

C-terminal polyhistidine tag for purification.

Calculated molecular weight: 70.0 kDa.



Formulation

Lyophilized from sterile PBS, pH 7.4

Typically contains 5-8% trehalose, mannitol, and 0.01% Tween-80 as protectants before lyophilization Contact us for customized formulations or special requirements

Purity

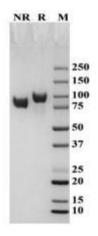
≥ 95% as determined by SDS-PAGE

≥ 95% as determined by SEC-HPLC

Endotoxin

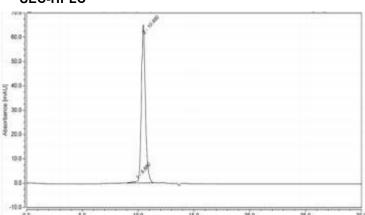
< 1.0 EU per µg of protein (LAL method)

SDS-PAGE



The recombinant Human ErbB3 protein, His-tag, was analyzed by SDS-PAGE under both reducing (R) and non-reducing (NR) conditions. The protein purity is ≥95.

SEC-HPLC



The purity of Human ErbB3, His-tag, is >95%. The molecular weight of the protein is approximately 75-100 kDa, as verified by SEC-HPLC.

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Stability & Storage

Samples are stable for 12 months from the date of receipt when stored at -20 $_{\circ}$ C to -80 $_{\circ}$ C under sterile conditions Recommend aliquoting into smaller portions to avoid repeated freeze-thaw cycles

Reconstitution

Detailed reconstitution instructions are provided with the product

Typically, add sterile PBS or desired buffer to dissolve the lyophilized protein to the target concentration

Protein Description

ErbB3 (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 contains a neuregulin-binding domain but lacks an active kinase domain, and therefore cannot mediate intracellular signal transduction via protein phosphorylation. However, when forming heterodimers with ErbB2 or other EGFR family members, ErbB3 participates in tyrosine phosphorylation, forming a receptor complex with high affinity that initiates downstream signaling pathways leading to cell proliferation or differentiation.

ErbB3 has been implicated in numerous cancers, including prostate, bladder, and breast tumors. This protein exists in multiple isoforms derived from alternative splicing, including a secreted isoform that lacks the transmembrane region and can modulate the activity of the membrane-bound form.

For research use only. Not for diagnostic or therapeutic purposes!