PRODUCT INFORMATION

Target	HER3
Synonyms	HER3;ERBB3
Description	Recombinant Human HER3 protein with C-terminal 6×His tag
Delivery	In Stock
Uniprot ID	P21860
Expression Host	HEK293
Tag	C-6×His Tag
Molecular Characterization	HER3(Ser20-Thr643) 6×His tag
Molecular Weight	The protein has a predicted molecular mass of 69.39 kDa after removal of the signal peptide.The apparent molecular mass of HER3-His is approximately 100-130 kDa due to glycosylation.
Purity	The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.
Formulation & Reconstitution	Lyophilized from sterile PBS, pH 7.4. Normally 5 % – 8% trehalose is added as protectants before lyophilization. Please see Certificate of Analysis for specific instructions of reconstitution.
Storage&Shipping	Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.
Background	This gene encodes a member of the epidermal growth factor receptor (EGFR) family of receptor tyrosine kinases. This membrane-bound protein has a neuregulin binding domain but not an active kinase domain. It therefore can bind this ligand but not convey the signal into the cell through protein phosphorylation. However, it does form heterodimers with other EGF receptor family members which do have kinase activity. Heterodimerization leads to the activation of pathways which lead to cell proliferation or differentiation. Amplification of this gene and/or overexpression of its protein have been reported in numerous cancers, including prostate, bladder, and breast tumors. Alternate transcriptional splice variants encoding different isoforms have been characterized. One isoform lacks the intermembrane region and is secreted outside the cell. This form acts to modulate the activity of the membrane-bound form. Additional splice variants have also been reported, but they have not been thoroughly characterized.
Usage	Research use only
Conjugate	Unconjugated

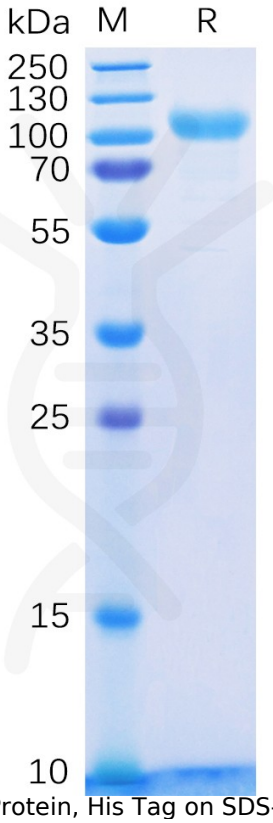

Figure 1. Human HER3 Protein, His Tag on SDS-PAGE under reducing condition.

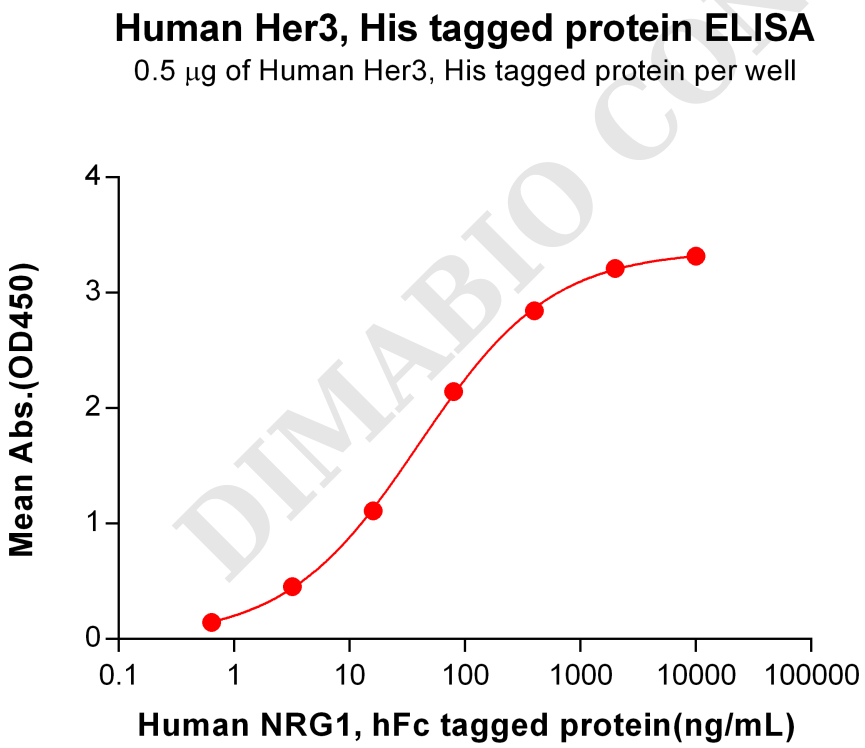

Figure 2. ELISA plate pre-coated by 2 μg/ml (100 μl/well) Human HER3, His tagged protein (PME100088) can bind Human NRG1, hFc tagged protein PME101093 in a linear range of 3.2-400 ng/ml.

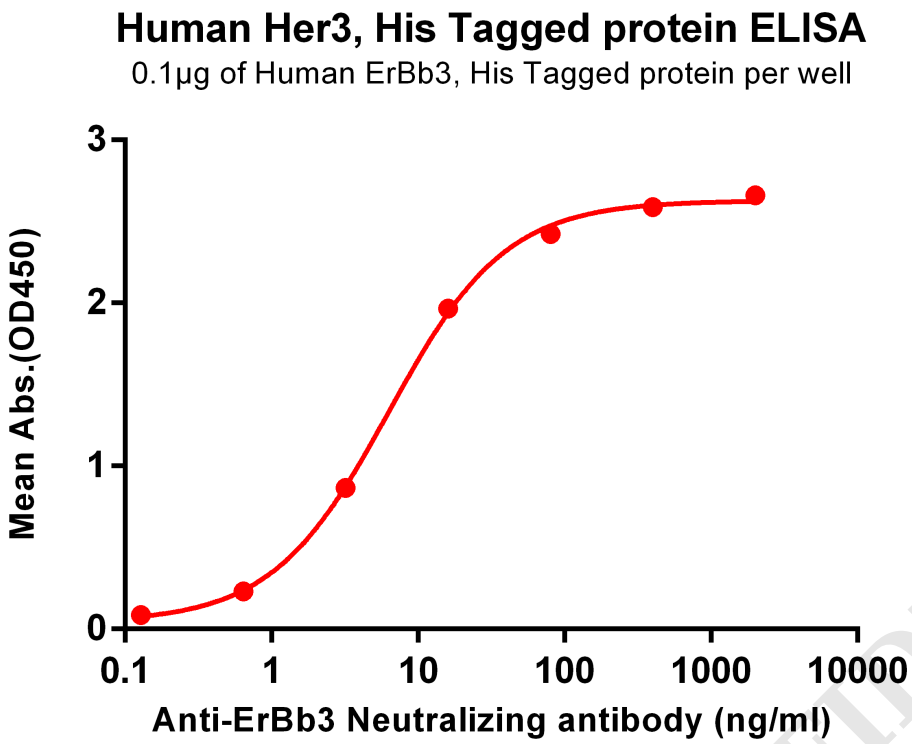

Figure 3. ELISA plate pre-coated by 1 μg/ml (100 μl/well) Human Her3, His tagged protein (PME100088) can bind Anti-ErBb3 Neutralizing antibody BME100057 in a linear range of 3.2-16 ng/ml.