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Anti-ERBB2 / HER2 / CD340 Reference Antibody (pertuzumab)

Recombinant Antibody
Catalog # APR10046

Product Information

Application	Functional assay, Kinetics (SPR), Kinetics (BLI), FACS, E, FTA
Primary Accession	P04626
Reactivity	Human
Clonality	Monoclonal
Isotype	Human IgG1
Calculated MW	137910

Additional Information

Target/Specificity	ERBB2 / HER2 / CD340
Endotoxin	
Conjugation	Unconjugated
Expression system	CHO
Format	Purified monoclonal antibody supplied in PBS, pH6.0, without preservative.This antibody is purified through a protein A column.

Protein Information

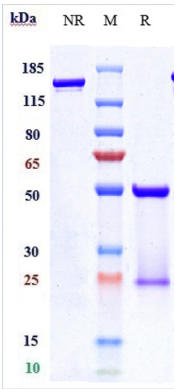
Name	ERBB2
Synonyms	HER2, MLN19, NEU, NGL
Function	Protein tyrosine kinase that is part of several cell surface receptor complexes, but that apparently needs a coreceptor for ligand binding. Essential component of a neuregulin-receptor complex, although neuregulins do not interact with it alone. GP30 is a potential ligand for this receptor. Regulates outgrowth and stabilization of peripheral microtubules (MTs). Upon ERBB2 activation, the MEMO1-RHOA-DIAPH1 signaling pathway elicits the phosphorylation and thus the inhibition of GSK3B at cell membrane. This prevents the phosphorylation of APC and CLASP2, allowing its association with the cell membrane. In turn, membrane-bound APC allows the localization of MACF1 to the cell membrane, which is required for microtubule capture and stabilization.
Cellular Location	Cell membrane; Single-pass type I membrane protein. Cell projection, ruffle membrane; Single-pass type I membrane protein. Note=Internalized from the cell membrane in response to EGF stimulation. [Isoform 2]: Cytoplasm.

Nucleus.

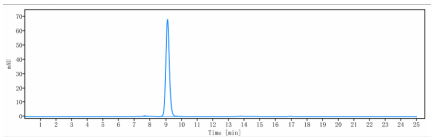
Tissue Location

Expressed in a variety of tumor tissues including primary breast tumors and tumors from small bowel, esophagus, kidney and mouth.

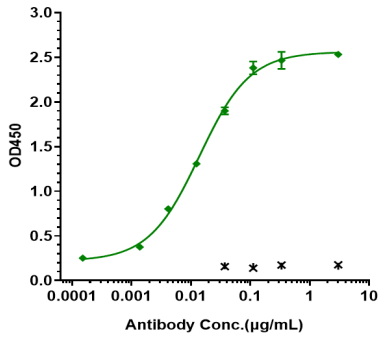
Images



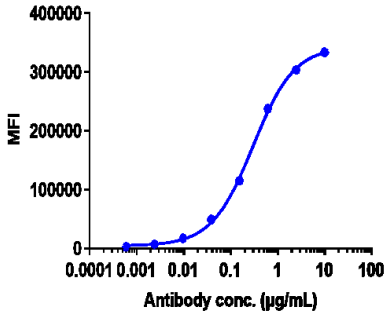
Anti- Human HER2(Pertuzumab) on SDS-PAGE under reducing (R) condition. The purity of the protein is greater than 95%.



The purity of anti- Human HER2(Pertuzumab) is 99.02%, determined by SEC-HPLC.

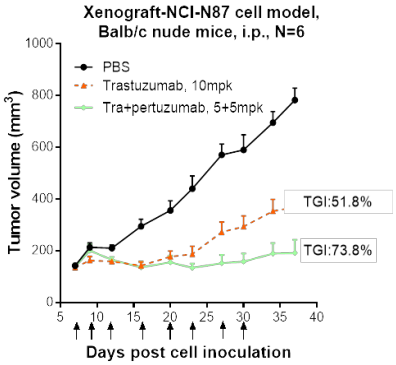


Immobilized human HER2 (His Tag, 2 μg/mL) can bind to anti- Human HER2(Pertuzumab) with an EC50 of 0.01375 ug/mL.



BT474 cells were stained with anti- Human HER2(Pertuzumab), with isotype and secondary-only controls. Flow analysis showed specific binding of the antibody, with an EC50 of 0.2994 ug/mL

The combination of two anti-human HER2 monoclonal antibodies, pertuzumab and trastuzumab, was evaluated for in vivo anti-tumor activity against NCI-N87 xenografts in Balb/c nude mice. Results demonstrated significant tumor growth inhibition: at a dose of 5 mg/kg, the tumor growth inhibition (TGI) rate reached 73.8% on day 37.



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