

# Anti-ERBB2 / HER2 / CD340 Reference Antibody (trastuzumab)

Recombinant Antibody Catalog # APR10121

#### **Specification**

## Anti-ERBB2 / HER2 / CD340 Reference Antibody (trastuzumab) - Product Information

Application
Primary Accession
Reactivity
Clonality
Isotype

Calculated MW

FC, E, FTA
P04626
Human, Mouse
Monoclonal

145.36 KDa

IqG1

# Anti-ERBB2 / HER2 / CD340 Reference Antibody (trastuzumab) - Additional Information

Target/Specificity ERBB2 / HER2 / CD340

#### **Endotoxin**

< 0.001EU/ µg, determined by LAL method.

## **Conjugation** Unconjugated

#### **Expression system**

CHO Cell

#### **Format**

Purified monoclonal antibody supplied in PBS, pH6.0, without preservative. This antibody is purified through a protein A column.

## **Storage**

-80°C for 2 years under sterile conditions -20°C for 1 year under sterile conditions Avoid repeated freeze-thaw cycles.

## Anti-ERBB2 / HER2 / CD340 Reference Antibody (trastuzumab) - 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**

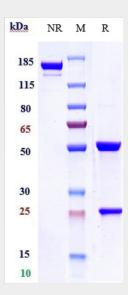
Expressed in a variety of tumor tissues including primary breast tumors and tumors from small bowel, esophagus, kidney and mouth.

## Anti-ERBB2 / HER2 / CD340 Reference Antibody (trastuzumab) - Protocols

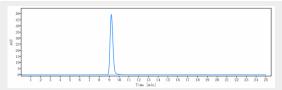
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Anti-ERBB2 / HER2 / CD340 Reference Antibody (trastuzumab) - Images



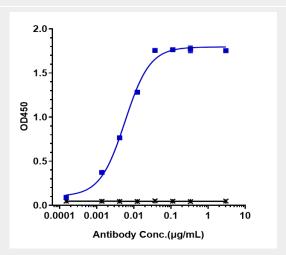
Anti-ERBB2 / HER2 / CD340 Reference Antibody (trastuzumab) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%



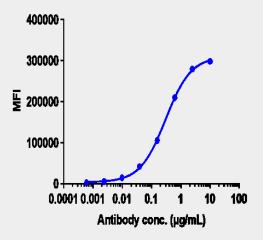
The purity of Anti-ERBB2 / HER2 / CD340 Reference Antibody (trastuzumab)is more than 95%



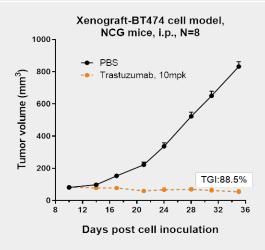
,determined by SEC-HPLC.



Immobilized human HER2, His at 2  $\,\mu g/mL$  can bind Anti-ERBB2 / HER2 / CD340 Reference Antibody (trastuzumab)  $\, \equiv C50 = 0.005735 \, \mu g/mL$ 



BT474 cells were stained with Anti-ERBB2 / HER2 / CD340 Reference Antibody (trastuzumab) and negative control protein respectively, washed and then followed by PE and analyzed with FACS, EC175=0.3024  $\mu$ g/mL



Trastuzumab inhibited the tumor growth of BT474 on NCG mice. The result showed significant anti-tumor effects, with an tumor inhibition rate (TGI) of 88.5% at 10 mpk at D35.



