

**AP08087PU-N****Polyclonal Antibody to ERBB3 / HER3 - Aff - Purified****Alternate names:**

ERBB-3, HER-3, Proto-oncogene-like protein c-ErbB-3, Receptor tyrosine-protein kinase erbB-3, Tyrosine kinase-type cell surface receptor HER3, c-erbB-3

**Quantity:**

0.1 mg

**Concentration:**

1.0 mg/ml

**Background:**

The ErbB3 gene encodes a member of the epidermal growth factor receptor (EGFR) family of receptor tyrosine kinases. ErbB3 is a membrane-bound protein which has a neuregulin binding domain but not an active kinase domain. It can therefore bind this ligand but cannot convey a signal into the cell via 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.

**Uniprot ID:**

[P21860](#)

**NCBI:**

[NP\\_001005915.1](#)

**GeneID:**

[2065](#)

**Host:**

Rabbit

**Immunogen:**

Peptide sequence around amino acids 1326~1330 (P-D-Y-W-H) derived from Human Her3/ErbB3.

**Format:**

**State:** Liquid purified Ig fraction.

**Purification:** Immunoaffinity Chromatography using epitope-specific immunogen.

**Buffer System:** PBS (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.4, 150 mM NaCl, 0.02% Sodium Azide and 50% Glycerol.

**Applications:**

**Western blot:** 1/500-1/1000.

Incubate membrane with diluted antibody in 5% nonfat milk, 1xTBS, 0.1% Tween-20 at 4°C with gentle shaking overnight.

**Immunofluorescence:** 1/100-1/200.

Immunohistochemistry on Paraffin-Embedded Sections: 1/50-1/100.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

**Specificity:**

This antibody detects endogenous levels of total Her3/ErbB3 protein.

**Species:** Human, Mouse and Rat.

Other species not tested.

**Add. Information:**

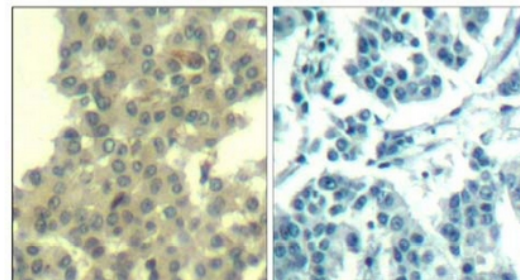
Molecular Weight: 185 kDa

**Storage:** Store the antibody (in aliquots) at -20°C.  
Avoid repeated freezing and thawing.  
Shelf life: One year from despatch.

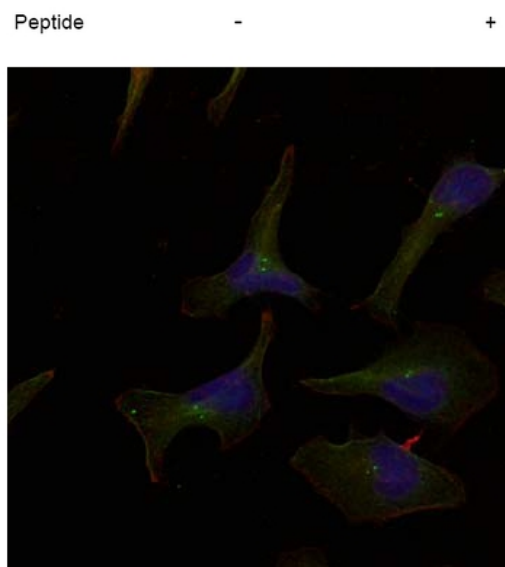
**General Readings:**

1. Holbro, T. et al. (2003) Proc. Natl. Acad. Sci. USA 100, 8933-8938.
2. Kobayashi, M. et al. (2003) Oncogene 22, 1294-1301.
3. Kim, H.H. et al. (1994) J. Biol. Chem. 269, 24747-24755.
4. Yarden, Y. and Sliwkowski, M.X. (2001) Nature Rev. Mol. Cell. Biol. 2, 127-137.

**Pictures:** **Figure 1.** Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using Her3/ErbB3 Antibody Cat.-No. AP08087PU (Left) and the same antibody preincubated with blocking peptide (Right).



**Figure 2.** Immunofluorescence staining of methanol-fixed HeLa cells using Her3/ErbB3 Antibody Cat.-No. AP08087PU (Red).



**Figure 3.** Western blot analysis of extracts from A431 cells using Her3/ErbB3 Antibody Cat.-No. AP08087PU

