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Schillerstr. 5

AP08032PU-S Polyclonal Antibody to ERBB3 / HER3 pTyr1328 - 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: $50 \mu g$ 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

GenelD: 2065
Host: Rabbit

Immunogen: The antiserum was produced against synthesized phosphopeptide derived from

human Her3/ErbB3 around the phosphorylation site of Tyrosine 1328 (P-D-YP-W-H).

Format: State: Liquid purified lg fraction.

Purification: Affinity Chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-

phosphopeptide corresponding to the phosphorylation site.

Buffer System: PBS (without Mg2+ and Ca2+), pH 7.4, 150 mM NaCl, 0.02% Sodium

Azide and 50% Glycerol.

Applications: Western Blot: 1/500-1/1000.

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: Antibody AP08032PU detects endogenous levels of Her3/ErbB3 only when

phosphorylated at Tyrosine 1328. **Species:** Human, Mouse and Rat.

Other species not tested.

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 pTyr1328 Antibody (#AP08032PU).

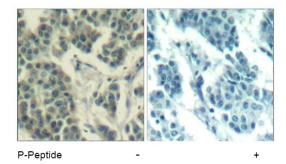


Figure 3. Immunofluorescence staining of methanol-fixed MCF7 cells using Her3/ErbB3 pTyr1328 Antibody (#AP08032PU, Red).

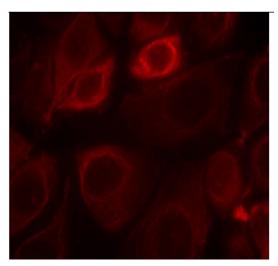


Figure 4 Western blot analysis of extracts from A431 cells untreated or treated with EGF using Her3/ErbB3 (pTyr1328) antibody

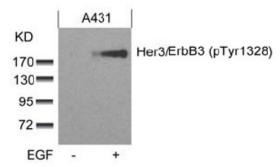




Figure 2. Western blot analysis of extracts from HUVEC cell using Her3/ErbB3 Antibody AP08087PU (Lane 1 and 2) and Her3/ErbB3 pTyr1328 Antibody (#AP08032PU, Lane 3 and 4).

