

## Mouse Monoclonal Antibody to

# erbB2/Her2 (phospho-Ser 1113)

## clone 9E10

**Order No.:** 0139-100/erbB2-9E10

**Size (µg)** 100

**Lot No.:** 0139S



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Isotype	Species Reactivity	Applications	Mol. Weight	Ref.Cell Line	Epitope	Immunogen
IgG1	human	WB, IHC, ELISA	185 kDa	A431	phospho-serine 1113 Q R Y pS E D P	phosphopeptide conjugated to hemocyanin

### Background and Specificity:

ErbB2 is a member of the EGFR/erbB-receptor tyrosine kinase family. ErbB2 is activated upon ligand dependent heterodimerization with EGFR or erbB4. ErbB2 homodimers are not favored due to the lack of an erbB2 specific extracellular ligand. Heterodimerization with EGFR or erbB4 leads to activation of the intrinsic tyrosine kinase activity of EGFR or erbB4 resulting in phosphorylation of multiple tyrosine residues within the erbB2 intracellular domain: Tyr 1023, Tyr 1112, Tyr 1139, Tyr 1196, Tyr 1222, and Tyr 1248. Transphosphorylation via src family kinases leads to phosphorylation of Tyr 877, via PKC of Thr 686, via CamKinase2 of Ser 1113. Phosphorylation of erbB2 at serine 1113 has been correlated with erbB2 overexpression and a poor prognosis. Thus the phosphorylation status of serine 1113 in erbB2 represents a novel and informative biomarker of cancer cell biology and tumor behavior. (Mol. Cell Biochem. **218**: 47-54, 2001).

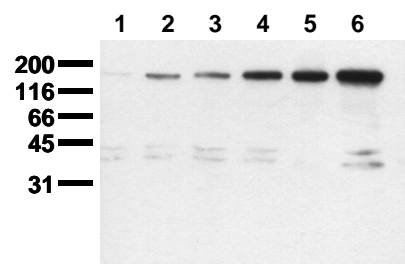
**Mab erbB2-9E10** specifically recognizes erbB2 phosphorylated at serine 1113 at 185 kDa.

### Related Products

- mab to erbB2 (aa 1240-1260)**  
#0192-100/erbB2-19D2
- mab to erbB2 (intracellular domain; aa 860-880)**  
#0222-100/erbB2-24B5
- mab to erbB2 (phospho-Thr 686)**  
#0182-100/erbB2-7F8
- mab to erbB2 (phospho-Tyr 1112)**  
#0216-100/erbB2-19G5
- mab to erbB2 (phospho-Tyr 1248; crossreacts with EGFR)**  
#0221-100/erbB2-6G7
- mab to erbB3 (aa1250-1270)**  
#0237-100/erbB3-5A12
- mab to erbB3 (C-terminus)**  
#0141-100/erbB3-11A4
- mab to erbB4 (aa1230-1250)**  
#0228-100/erbB4-6C5
- mab to erbB4 (pospho-Tyr 1242)**  
#0229-100/erbB4-4C6

For monoclonal antibodies against EGFR and downstream targets, please refer to our website at [www.nanotools.de](http://www.nanotools.de)

<b>Purification:</b>	The antibody was purified from serum-free cell culture supernatant by subsequent thiophilic adsorption and size exclusion chromatography.
<b>Formulation:</b>	lyophilized from 1 ml PBS / 0.09 % Na-azide / PEG and Sucrose.
<b>Reconstitution:</b>	Reconstitute with 1 ml H <sub>2</sub> O (15 min, RT).
<b>Stability:</b>	For long-term storage, freeze lyophilizate upon arrival (-20°C). Upon reconstitution, aliquote and freeze in liquid nitrogen; reconstituted antibody can be stored frozen at -80°C up to 1 year. Thaw aliquots at 37°C. Thawed aliquots may be stored at 4°C up to 3 months.
	<b>Avoid repeated freeze / thaw cycles.</b>
<b>Positive Control:</b>	#0832: Cell lysate from pervanadate-treated A431 cells
<b>Immunoblotting:</b>	0.5 µg/ml for HRPO/ECL detection <b>Recommended blocking buffer:</b> Casein/Tween 20 based blocking and blot incubation buffer, e.g. nanoTools product #3031-500/CPPT or #3031-3000/CPPT.
<b>Immunoprecipitation:</b>	ND
<b>Immunocytochemistry</b>	use 1 - 10 µg/ml
<b>ELISA:</b>	use at 0.1 µg/ml



### erbB2 Transactivation

Serum starved A431 cells were treated for 15min as indicated. Whole cell lysates were separated by SDS-PAGE (ca 20.000 cells/lane). The immunoblot was probed with mab erbB2 - 9E10 (0.5 µg/ml) for 1h at RT and developed by ECL (exp. time: 30 sec).

lane 1: control; lane 2: TGFbeta; lane 3: Bradykinin; lane 4: Pervanadate; lane 5: Anisomycin; lane 6: PMA

**All products are supplied for research and investigational use only. Not for use in humans or laboratory animals.**