

Mouse Monoclonal Antibody to

erbB2/Her2 (phospho-Ser 1113)

clone 9E10

biotinylated

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

Size (µg) 100

Lot No.: 0139S

02/230207F

Isotype	Species	Reactivity	Applications	Mol. Weight	Ref.Cell Line	Epitope	Immunogen
IgG1	human		WB, ELISA, IHC	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. Dysregulation of erbB2 and/or activation of downstream signaling pathways has been implicated in many human cancers. 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 Thr 686 and Ser 1113 interferes with erbB2 endocytosis and degradation. In breast cancer, 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

Purification:	The antibody was purified from serum-free cell culture supernatant by subsequent thiophilic adsorption and size exclusion chromatography.
Formulation:	liquid; 0.5 mg/ml in PBS/0.09% Na-Azide/PEG and Sucrose
Reconstitution:	
Stability:	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.
	Avoid repeated freeze / thaw cycles.
Positive Control:	#0832: Cell lysate from pervanadate-treated A431 cells
Immunoblotting:	0.5 µg/ml for HRPO/ECL detection Recommended blocking buffer: Casein/Tween 20 based blocking and blot incubation buffer, e.g. nanoTools product #3031-500/CPPT or #3031-3000/CPPT.
Immunoprecipitation:	ND
Immunocytochemistry:	use 1 - 10 µg/ml
ELISA:	use at 0.1 µg/ml

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