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Mouse Monoclonal Antibody to

erbB2/Her2 (phospho-Tyr 1112)

clone 19G5

0216-100/erbB2-19G5 Order No.:

Size (µg) 100 0216S Lot No.:

one	Immunogen
000	03/080507F
222	

Mol. Weight Isotype **Species Reactivity Applications Ref.Cell Line Epitope** human, mouse, rat, WB, ICC IgG1 185 kDa SKOV-3 phospho-Tyr 1112 phosphopeptide LQRpYSED conjugated to dog 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

Mab erbB2-19G5 specifically recognizes erbB2 phosphorylated at tyrosine 1112 at 185 kDa.

Purification: The antibody was purified from serum-free cell culture

supernatant by subsequent ultrafiltration and size exclusion

chromatography.

Formulation: lyophilized from 1 ml PBS / 0.09 % Na-azide / PEG and

Sucrose.

Reconstitute with 1 ml H₂O (15 min, RT). Reconstitution:

Aliquote and freeze in liquid nitrogen; reconstituted antibody can Stability:

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.

#0993: Cell lysate from EGF-treated SKOV-3 cells **Positive Control:**

0.5 µg/ml for HRPO/ECL detection Immunoblotting:

> 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 ND Immunocytochemistry:

ND **ELISA:**

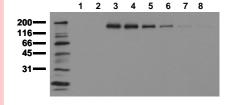
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Related Products

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-Ser 1113) #0139-100/erbB2-9E10 mab to erbB2 (phospho-Thr 686) #0182-100/erbB2-7F mab to erbB2 (phospho-Tyr 1248; crossreacts with EGFR) #0221-100/erbB2-6G7 mab to erbB3 (aa1250-1270) #0237-100/erbB3-5A1 mab to erbB3 (C-terminus) #0141-100/erbB3-11A4 mab to erbB4 (aa1230-1250) #0228-100/erbB4-6C5 mab to erbB4 (pospho-Tyr 1242)

For monoclonal antibodies against EGFR and downstream targets, please refer to our website at www.nanotools.de

#0229-100/erbB4-4C6



erbB2 activation

Serum starved A549 cells were incubated with 10 ng/ml EGF for the indicated times. Whole cell lysates were prepared with lysis buffer V19 and separated by SDS-PAGE (ca 20.000 cells/lane). The immunoblot was probed with mab erbB2-19G5 (0.5 µg/ ml) for 1h at RT and developed by ECL (exp. time: 30 sec).

ne 1: control; lane 2: 5 min EGF; lane 3: 15 min EGF; lane 4: 30 min EGF; lane 5: 1h EGF; lane 6; 2h EGF; lane 7: 4h EGF;