

Product Data Sheet: Phospho-ErbB2/HER2-(Y1221/1222)

Cat. No: MAB-94209
Conjugate: Unconjugated

 Size:
 100 ug

 Clone:
 6B12

 Concentration:
 1mg/ml

 Host:
 Rb

Isotype: IgG
Reactivity: Hu

Purification:

Applications: WB 1:1000 **Molecular Weight:** 138 kDa

Monoclonal antibodies are produced by immunizing animals with a synthetic

phosphopeptide corresponding to residues surrounding tyrosine 1221/1222 of human ErbB2 protein. Antibodies are purified by protein A and peptide affinity

chromatography.

Background: The ErbB2 (HER2) proto-oncogene encodes a 185 kDa

transmembrane, receptor-like glycoprotein with intrinsic tyrosine kinase activity (1). While ErbB2 lacks an identified ligand, ErbB2 kinase activity can be activated

in the absence of a ligand when overexpressed and through heteromeric

associations with other ErbB family members (2). Amplification of the ErbB2 gene and overexpression of its product are detected in almost 40% of human breast cancers (3). Binding of the c-Cbl ubiquitin ligase to ErbB2 at Tyr1112 leads to ErbB2 poly-ubiquitination and enhances degradation of this kinase (4). ErbB2 is a key therapeutic target in the treatment of breast cancer and other carcinomas

Background: and targeting the regulation of ErbB2 degradation by the c-Cbl-regulated

proteolytic pathway is one potential therapeutic strategy. Phosphorylation of the kinase domain residue Tyr877 of ErbB2 (homologous to Tyr416 of pp60cSrc) may be involved in regulating ErbB2 biological activity. The major autophosphorylation sites in ErbB2 are Tyr1248 and Tyr1221/1222; phosphorylation of these sites

couples ErbB2 to the Ras-Raf-MAP kinase signal transduction pathway

(1,5).Phospho-HER2/ErbB2 (Tyr1221/1222) Antibody detects endogenous levels of ErbB2 only when phosphorylated at tyrosine 1221/1222. The antibody may detect

other activated Erb family members.

Form: liquid

Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

Storage: Store at -20°C. Avoid freeze / thaw cycles.

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