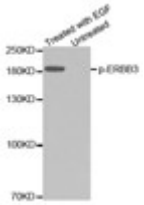
Product Data Sheet: Phospho-ErbB3/HER3 (Y1328)

Cat. No:	MAB-94210
Conjugate:	Unconjugated
Size:	100 ug
Clone:	E1J1T
Concentration:	1mg/ml
Host:	Rb
Isotype:	IgG
Reactivity:	Hu, Ms, Rt
Applications:	Western Blotting 1:1000 IHC 1:50 – 1:100 IF 1:100 – 1:200
Molecular Weight:	185 kDa
Purification:	Monoclonal antibody is produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Tyr1328 of human Her3/ ErbB3 protein.
Background:	HER3/ErbB3 is a member of the ErbB receptor protein tyrosine kinase family, but it lacks tyrosine kinase activity. Tyrosine phosphorylation of ErbB3 depends on its association with other ErbB tyrosine kinases. Upon ligand binding, heterodimers form between ErbB3 and other ErbB proteins, and ErbB3 is phosphorylated on tyrosine residues by the activated ErbB kinase (1,2). There are at least 9 potential tyrosine phosphorylation sites in the carboxy-terminal tail of ErbB3. These sites serve as consensus binding sites for signal transducing proteins, including Src family members, Grb2, and the p85 subunit of PI3 kinase, which mediate ErbB downstream signaling (3). Both Tyr1222 and Tyr1289 of ErbB3 reside within a YXXM motif and participate in signaling to PI3K (4). Investigators have found that ErbB3 is highly expressed in many cancer cells (5) and activation of the ErbB3/PI3K pathway is correlated with malignant phenotypes of adenocarcinomas (6). Research studies have demonstrated that in tumor development, ErbB3 may function as an oncogenic unit together with other ErbB members (e.g. ErbB2 requires ErbB3 to drive breast tumor cell proliferation) (7). Thus, investigators view inhibiting interaction between ErbB3 and ErbB tyrosine kinases as a novel strategy for anti-tumor therapy..Phospho-HER3/ErbB3 (Tyr1328) (E1J1T) Rabbit mAb recognizes endogenous levels of human and mouse HER3/ErbB3 protein only when phosphorylated at Tyr1328. This antibody might cross-react with other overexpressed proteins phosphorylated at tyrosine residues, including EGFR.
Form:	liquid
Buffer:	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage:	Store at -20℃. Avoid freeze / thaw cycles



Western blot analysis of extracts from A431 cells using Phospho-ErbB3

(Tyr1328) Monoclonal Antibody

References

(1) Yarden, Y. and Sliwkowski, M.X. (2001) Nature Rev. Mol. Cell. Biol. 2, 127-137. (2) Guy, P.M. et al. (1994) Proc. Natl. Acad. Sci. USA 91, 8132-8136. (3) Songyang, Z. et al. (1993) Cell 72, 767-778. (4) Kim, H.H. et al. (1994) J. Biol. Chem. 269, 24747-55. (5) Sithanandam, G. et al. (2003) Carcinogenesis 24, 1581-1592. (6) Kobayashi, M. et al. (2003) Oncogene 22, 1294-1301. (7) Holbro, T. et al. (2003) Proc. Natl. Acad. Sci. USA 100, 8933-8938. (8) Rush, J. et al. (2005) Nat Biotechnol 23, 94-101.