Product name:	Phospho-EGFR (Y992)
Cat number:	MAB-90139
Conjugate:	Unconjugated
Size:	100 ug
Clone:	EM-12
Concentration:	1mg/ml
Host:	Ms
Isotype:	IgG1
Immunogen:	Synthetic phospho-peptide covering sequence around tyrosine 992 of human EGFR.
Reactivity:	Hu
Applications:	Flow Cytometry Immunoprecipitation Western Blotting Recommended dilution: 1 µg/ml Positive control: EGF-stimulated A431 Negative control: Non-stimulated A431
Purification:	Purified from hybridoma culture supernatant by protein-A affinity chromatography.
Form:	liquid
Buffer:	Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4
Storage:	Store at 2-8oC. Do not freeze. Do not use after expiration date stamped on vial label.
Background:	The oncoprotein EGFR (epidermal growth factor receptor), also known as HER1 / ErbB1, is a member of ErbB family of cell surface receptor tyrosine kinases. This 170 kDa transmembrane glycoprotein is often associated with cancerogenesis, although its activation state is controlled at various levels including trafficking and degradation steps. Binding of receptor-specific ligands to the EGFR ectodomain results in formation of homodimeric or heterodimeric kinase-active complexes into which HER2 / ErbB2 is recruited as a preferred partner. Subsequent signaling cascades such as RAS/MAPK and PI3K/AKT pathways lead to cell proliferation and survival responses.The antibody EM-12 reacts with human EGFR (ErbB1 / HER1) phosphorylated on tyrosine 992.

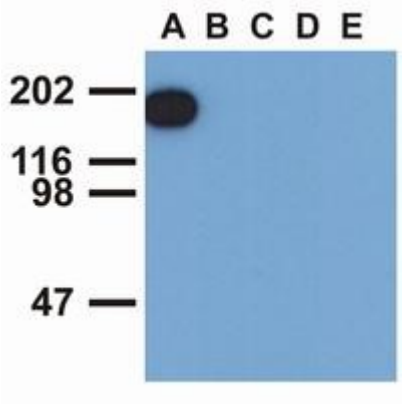

Fig. 1. Western blotting analysis of EGFR (phospho-Tyr1173) by mouse monoclonal antibody EM-13 in EGF-treated A431 (A), CALU-3 (B), MCF-7 (C), Jurkat (D) and Ramos (E) cell lines (reducing conditions).

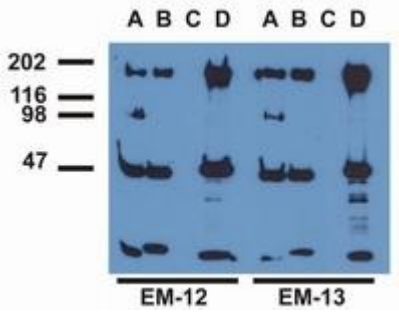

Fig. 2. Immunoprecipitation of EGFR from EGF-treated A431 cells by monoclonal antibodies EM-12 (A), EM-13 (B), a commercial anti-EGFR polyclonal antibody (C) and anti-EGFR monoclonal mAb108 (D). The precipitates were immunoblotted with EM-12 or EM-13 antibody, and goat anti-mouse-HRP.

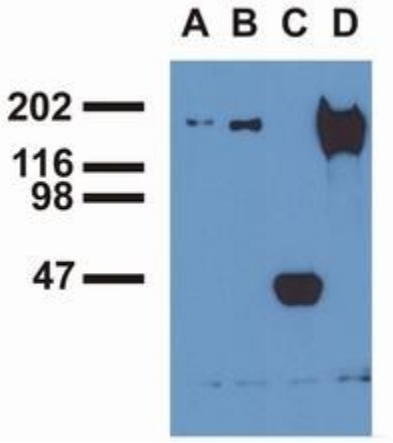

Fig. 3. Immunoprecipitation of EGFR from EGF-treated A431 cells by phosphospecific monoclonal antibodies EM-12 (A), EM-13 (B), a commercial anti-EGFR polyclonal antibody (C) and anti-EGFR monoclonal mAb108 (D). The precipitates were immunoblotted with a commercial anti-EGFR polyclonal and goat anti-rabbit-HRP.