

TECHNICAL DATA SHEET

CyFlow™ EGFR Purified Anti-Hu; Clone EM-12

REF BZ090132

For Research Use Only.
Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	EGFR (Phospho-Tyr992)
Alternative Names	—
Clone	EM-12
Clonality	monoclonal
Format	Purified
Host / Isotype	Mouse / IgG1
Species Reactivity	Human
Negative Species Reactivity	—
Quantity [Concentration]	0.1 mg [1 mg/ml]
Immunogen	Synthetic phospho-peptide covering sequence around tyrosine 992 of human EGFR

Specificity

The mouse monoclonal antibody EM-12 recognizes EGFR phosphorylated on tyrosine 992.

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Application

Based on published sources, this antibody is suitable for the following applications:

- Flow cytometry
- Immunoprecipitation
- Western blot

Storage Buffer

The reagent is provided in phosphate buffered saline (PBS) solution, pH $\approx$ 7.4, containing 0.1% (w/v) sodium azide.

Storage and Stability

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	Do not use after expiration date stamped on vial label.

Background Information

The oncoprotein EGFR (epidermal growth factor receptor), also known as HER1 or 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.

References

- Batzer AG, Blaikie P, Nelson K, Schlessinger J, Margolis B: The phosphotyrosine interaction domain of Shc binds an LXPXY motif on the epidermal growth factor receptor. Mol Cell Biol. 1995 Aug; 15(8):4403-9. < PMID: 7542744 >
- Moulder SL, Yakes FM, Muthuswamy SK, Bianco R, Simpson JF, Arteaga CL: Epidermal growth factor receptor (HER1 tyrosine kinase inhibitor ZD1839 (Iressa) inhibits HER2/neu (erbB2)-overexpressing breast cancer cells in vitro and in vivo. Cancer Res. 2001 Dec 15; 61(24):8887-95. < PMID: 11751413 >
- Daniele T, Di Tullio G, Santoro M, Turacchio G, De Matteis MA: ARAP1 regulates EGF receptor trafficking and signalling. Traffic. 2008 Dec; 9(12):2221-35. < PMID: 18764928 >

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- Rappl A, Piontek G, Schlegel J: EGFR-dependent migration of glial cells is mediated by reorganisation of N-cadherin. J Cell Sci. 2008 Dec 15; 121(24):4089-97. < PMID: 19033391 >
- Gandhi J, Zhang J, Xie Y, Soh J, Shigematsu H, Zhang W, Yamamoto H, Peyton M, Girard L, Lockwood WW, Lam WL, Varella-Garcia M, Minna JD, Gazdar AF: Alterations in genes of the EGFR signaling pathway and their relationship to EGFR tyrosine kinase inhibitor sensitivity in lung cancer cell lines. PLoS ONE. 2009; 4(2):e4576. < PMID: 19238210 >
- Yan F, Cao H, Chaturvedi R, Krishna U, Hobbs SS, Dempsey PJ, Peek RM Jr, Cover TL, Washington MK, Wilson KT, Polk DB: Epidermal growth factor receptor activation protects gastric epithelial cells from Helicobacter pylori-induced apoptosis. Gastroenterology. 2009 Apr; 136(4):1297-1307, e1-3. < PMID: 19250983 >

The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

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