

1P-680-T025

## **Monoclonal Antibody to EGFR** Phycoerythrin (PE) conjugated (25 tests)

Clone: EGFR1

Isotype: Mouse IqG2b

Specificity: The mouse monoclonal antibody EGFR1 reacts with extracellular domain of

human protein kinase EGFR (ErbB1 / HER1); epitope within amino acids 6-273.

**RUO** Regulatory Status:

Immunogen: Human epidermoid carcinoma line A431

**Species Reactivity:** Human, Equine (Horse)

**Negative Species:** Mouse

Preparation: The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum

conditions. The conjugate is purified by size-exclusion chromatography and

adjusted for direct use. No reconstitution is necessary.

Storage Buffer: The reagent is provided in stabilizing phosphate buffered saline (PBS) solution

containing 15mM sodium azide.

Storage / Stability: Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not

use after expiration date stamped on vial label.

The reagent is designed for Flow Cytometry analysis of human blood cells using 10  $\mu$ l reagent / 100  $\mu$ l of whole blood or 10 $^6$  cells in a suspension. Usage:

The content of a vial (0.25 ml) is sufficient for 25 tests.

**Expiration:** See vial label See vial label Lot Number:

**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.



## PRODUCT DATA SHEET

## References:

\*Aigner A, Juhl H, Malerczyk C, Tkybusch A, Benz CC, Czubayko F: Expression of a truncated 100 kDa HER2 splice variant acts as an endogenous inhibitor of tumour cell proliferation. Oncogene. 2001 Apr 19;20(17):2101-11.

\*Akiyama M, Smith LT, Shimizu H: Changing patterns of localization of putative stem cells in developing human hair follicles. J Invest Dermatol. 2000 Feb;114(2):321-7.

\*Rebetz J, Tian D, Persson A, Widegren B, Salford LG, Englund E, Gisselsson D, Fan X: Glial progenitor-like phenotype in low-grade glioma and enhanced CD133-expression and neuronal lineage differentiation potential in high-grade glioma. PLoS One. 2008 Apr 9;3(4):e1936.

\*Fortunel NO, Hatzfeld JA, Rosemary PA, Ferraris C, Monier MN, Haydont V, Longuet J, Brethon B, Lim B, Castiel I, Schmidt R, Hatzfeld A: Long-term expansion of human functional epidermal precursor cells: promotion of extensive amplification by low TGF-beta1 concentrations. J Cell Sci. 2003 Oct 1;116(Pt 19):4043-52.

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