TECHNICAL DATA SHEET

CyFlow™ EGFR PE

Anti-Hu; Clone EGFR1

REF **AZ205734**

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	EGFR
Alternative Names	—
Clone	EGFR1
Clonality	monoclonal
Format	PE
Host / Isotype	Mouse / IgG2b
Species Reactivity	Human, Horse
Negative Species Reactivity	Mouse
Quantity	100 tests
Immunogen	Human epidermoid carcinoma line A431

Specificity

The mouse monoclonal antibody EGFR1 recognizes extracellular domain of human protein kinase EGFR; epitope within amino acids 6-273.

Contact Information:

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Application

The reagent is designed for Flow Cytometry analysis of human blood cells. Recommended usage is 10 µl reagent / 100 µl of whole blood or 10^6 cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests.

Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in stabilizing phosphate buffered saline (PBS) solution, pH ≈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

- 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. < PMID: 10651993 >
- 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. < PMID: 11360194 >
- 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(19):4043-52. < PMID: 12953061 >

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

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