

# **TECHNICAL DATA SHEET**

# CyFlow™ EGFR Purified Anti-Hu; Clone EGFR1



AX065549

# For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

## **Specifications**

Antigen	EGFR
Alternative Names	_
Clone	EGFR1
Clonality	monoclonal
Format	Purified
Host / Isotype	Mouse / IgG2b
Species Reactivity	Human, Horse
Negative Species Reactivity	Mouse
Quantity [Concentration]	0.1 mg [ 1 mg/ml ]
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:**

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: <u>info@sysmex-partec.com</u>



#### **Application**

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

- Flow cytometry
- Immunoprecipitation
- · Immunohistochemistry (frozen sections)
- · Immunocytochemistry

#### **Storage Buffer**

The reagent is provided in 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

Rev 1.0 Date: 2016-07-15 EN CyFlow™ EGFR Purified



cells: promotion of extensive amplification by low TGF-beta1 concentrations. J Cell Sci. 2003 Oct 1; 116(19):4043-52. < PMID: 12953061 >

 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. < PMID: 18398462 >

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

#### **Contact Information:**

Rev 1.0 Date: 2016-07-15 EN CyFlow™ EGFR Purified