

TECHNICAL DATA SHEET

CyFlow™ c-Myc FITC Anti-Hu; Clone 9E10

REF BV730728

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	c-Myc
Alternative Names	—
Clone	9E10
Clonality	monoclonal
Format	FITC
Host / Isotype	Mouse / IgG1
Species Reactivity	Human, Fusion Proteins
Negative Species Reactivity	—
Quantity [Concentration]	0.1 mg [1 mg/ml]
Immunogen	Synthetic peptide sequence (AEEQKLISEEDLL) corresponding to the C-terminal region of human c-Myc

Specificity

The mouse monoclonal antibody 9E10 may be used to detect the c-Myc tag. The c-myc gene (8q24 on human chromosome) is the cellular homologue of the v-myc gene originally isolated from an avian

Contact Information:

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

myelocytomatosis virus. The c-Myc protein is a transcription factor (nuclear localization). c-Myc is commonly activated in a variety of tumor cells and plays an important role in cellular proliferation, differentiation, apoptosis and cell cycle progression. The phosphorylation of c-Myc has been investigated and previous studies have suggested a functional association between phosphorylation at Thr58/Ser62 by glycogen synthase kinase 3, cyclin-dependent kinase, ERK2 and C-Jun N-terminal Kinase (JNK) in cell proliferation and cell cycle regulation. In normal cells the expression of c-Myc is tightly regulated but in human cancers c-Myc is frequently deregulated. c-Myc is also essential for tumor cell development in vasculogenesis and angiogenesis that distribute blood throughout the cells.

Application

The reagent is designed for Flow Cytometry analysis. Suggested working usage is 5 µg/ml. Indicated dilution is recommended starting point for use of this product, but working concentrations should be validated by the investigator.

Other usages may be determined from the scientific literature.

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.

References

- Persson H, Hennighausen L, Taub R, DeGrado W, Leder P: Antibodies to human c-myc oncogene product: evidence of an evolutionarily conserved protein induced during cell proliferation. Science. 1984 Aug 17; 225(4663):687-93. < PMID: 6431612 >
- Evan GI, Lewis GK, Ramsay G, Bishop JM: Isolation of monoclonal antibodies specific for human c-myc proto-oncogene product. Mol Cell Biol. 1985 Dec; 5(12):3610-6. < PMID: 3915782 >
- Spandidos DA, Pintzas A, Kakkanas A, Yiagnisis M, Mahera H, Patra E, Agnantis NJ: Elevated expression of the myc gene in human benign and malignant breast lesions compared to normal tissue. Anticancer Res . 1987; 7(6):1299-304. < PMID: 3327455 >

Contact Information:

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

- Siegel J, Brandner G, Hess RD: Cross-reactivity of the monoclonal antibody 9E10 with murine c-MYC. *Int J Oncol.* 1998 Dec; 13(6):1259-62. < PMID: 9824641 >
- Dang CV, Resar LM, Emison E, Kim S, Li Q, Prescott JE, Wonsey D, Zeller K: Function of the c-Myc oncogenic transcription factor. *Exp Cell Res.* 1999; 253(1):63-77. < PMID: 10579912 >
- Prendergast GC: Mechanisms of apoptosis by c-Myc. *Oncogene.* 1999; 18(19):2967-2987. < PMID: 10378693 >
- Boxer LM, Dang CV: Translocations involving c-myc and c-myc function. *Oncogene.* 2001; 20(40):5595-5610. < PMID: 11607812 >
- Hilpert K, Hansen G, Wessner H, Kuttner G, Welfle K, Seifert M, Hohne W: Anti-c-myc antibody 9E10: epitope key positions and variability characterized using peptide spot synthesis on cellulose. *Protein Eng.* 2001 Oct; 14(10):803-6. < PMID: 11739900 >
- Hoffman B, Amanullah A, Shafarenko M, Liebermann DA: The proto-oncogene c-myc in hematopoietic development and leukemogenesis. *Oncogene.* 2002; 21(21):3414-3421. < PMID: 12032779 >
- Cermák L, Símová S, Pintzas A, Horejsí V, Andera L: Molecular mechanisms involved in CD43-mediated apoptosis of TF-1 cells: Roles of transcription Daxx expression, and adhesion molecules. *J Biol Chem.* 2002 Mar 8; 277(10):7955-61. < PMID: 11773067 >
- Baggio R, Burgstaller P, Hale SP, Putney AR, Lane M, Lipovsek D, Wright MC, Roberts RW, Liu R, Szostak JW, Wagner RW: Identification of epitope-like consensus motifs using mRNA display. *J Mol Recognit.* 2002 May-Jun; 15(3):126-34. < PMID: 12203838 >
- Fujiwara K, Poikonen K, Aleman L, Valtavaara M, Saksela K, Mayer BJ: A single-chain antibody/epitope system for functional analysis of protein-protein interactions. *Biochemistry.* 2002 Oct 22; 41(42):12729-38. < PMID: 12379115 >
- Wang X, Campoli M, Ko E, Luo W, Ferrone S: Enhancement of scFv fragment reactivity with target antigens in binding assays following mixing with anti-tag monoclonal antibodies. *J Immunol Methods.* 2004 Nov; 294(1-2):23-35. < PMID: 15604013 >
- Veracini L, Simon V, Richard V, Schraven B, Horejsi V, Roche S, Benistant C: The Csk-binding protein PAG regulates PDGF-induced Src mitogenic signaling via GM1. *J Cell Biol.* 2008 Aug 11; 182(3):603-14. < PMID: 18695048 >

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

Contact Information:

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

