

## TECHNICAL DATA SHEET

### CyFlow™ c-Myc Biotin Anti-Hu; Clone 9E10

**REF** AJ852400

**For Research Use Only.**

**Not for use in diagnostic or therapeutic procedures.**

### Specifications

|                                    |                                                                                                  |
|------------------------------------|--------------------------------------------------------------------------------------------------|
| <b>Antigen</b>                     | c-Myc                                                                                            |
| <b>Alternative Names</b>           | —                                                                                                |
| <b>Clone</b>                       | 9E10                                                                                             |
| <b>Clonality</b>                   | monoclonal                                                                                       |
| <b>Format</b>                      | Biotin                                                                                           |
| <b>Host / Isotype</b>              | Mouse / IgG1                                                                                     |
| <b>Species Reactivity</b>          | Human, Fusion Proteins                                                                           |
| <b>Negative Species Reactivity</b> | —                                                                                                |
| <b>Quantity [Concentration]</b>    | 0.1 mg [ 1 mg/ml ]                                                                               |
| <b>Immunogen</b>                   | 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](mailto: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 indirect immunofluorescence analysis by Flow Cytometry. Working concentrations should be determined 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  $\approx$ 7.4, containing 0.1% (w/v) sodium azide.

## Storage and Stability

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

---

### 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](mailto:info@sysmex-partec.com)

- 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](http://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](mailto:info@sysmex-partec.com)