ALPHA DIAGNOSTIC INTERNATIONAL

Product Specification Sheet

Life Technologies™ Your Molecular & Cell Technology Partner

Human c-Myc protein control

□ **Cat. MYC17-R-10**	Recombinant purified human c-myc protein control	**SIZE**: 10 ug
□ **Cat. MYC17-R-50**	Recombinant purified human c-myc protein control	**SIZE**: 50 ug

Myc gene was first discovered in Burkitt's lymphoma patients. In Burkitt's lymphoma, cancer cells show chromosomal translocations, in which Chromosome 8 is frequently involved. Cloning the break point of the fusion chromosomes revealed a gene that was similar to myelocytomatosis viral oncogene (v-Myc). The new cellular gene was named c-Myc. Human c-myc (accession # P01106; 439-aa, chromosome 8q24) is a protooncogene, which is overexpressed in a wide range of human cancers. When it is specifically-mutated, or overexpressed, it increases cell proliferation and functions as an oncogene. It is a transcription factor that regulates expression of a great number of genes through binding on Enhancer Box sequences (E-boxes) and recruiting histone acetyltransferases (HATs). Myc belongs to Myc family of transcription factors, which also includes N-Myc and L-Myc genes. Myc-family transcription factors contain the bHLH/LZ (basic Helix-Loop-Helix Leucine Zipper) domain.

An epitope located within amino acids 410-419 (EQKLISEEDL) of human c-Myc has been widely used as a tag in many expression vectors, enabling the expression of proteins as c-Myc tag fusion proteins. Epitope tags antibodies provide a method to immunolocalize the myc-fusion gene products in a variety of cell types, to study the topology of proteins and protein complexes, and to identify associated proteins. In addition, they allow characterization of newly identified, low abundance or poorly immunogenic proteins when protein specific antibodies are not available. It is also possible to use ant-tag antibodies for the purification of fusion proteins. Purity of fusion proteins can be followed by Tag-antibodies. Very often, fusion proteins are directly injected into animals to generate antibodies. Some fusion tags can be removed later by treatment with enzymes to generate tag-free recombinant proteins.

Source of Antigen and Antibodies

Antigen	Recombinant (E. coli) purified human c-myc full length protein (~65 kda) (#MYC17-R-10)
Ab Host/type	Rabbit, Polyclonal, aff pure IgG # MYC16-A supplied in PBS, pH 7.4, 0.2% BSA
2-Ab	Cat # 20320, goat anti-rabbit IgG-HRP (AP, biotin, FITC conjugates also available).
-ve	Cat # 20009-1, Rabbit (non-immune) Serum IgG, purified, suitable for ELISA, Western, IHC as –ve control

Human c-myc protein (full length gene accession # P01106) was expressed as fusion protein (T7-tag-His-tag-Myc) in E. Coli and purified (>95%, major band at ~65 kda). Purified myc protein is supplied in 50 mM Tris, pH 8.0, 250 mM NaCl, 0.75% sarcosine, 10 mM beta mercaptoethanol at a concn of 1 mg/ml (lot specific concn is provided on the vial). Store at -20oC or below and do not freeze and thaw.

Biologically activity or Endotoxin concentration is not established.

Storage

Short-term: unopened, undiluted liquid vials for less than a week at 4oC and powder at -20oC.

Long-term: at –20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at –20oC or below.
Shipping: 4oC for solutions and room temp for powder.

Recommended Usage

Recombinant c-myc protein is suitable for ELISA or other applications where protein is required.

Western Blotting

Purified c-myc protein can also be used positive control for anti-c-myc antibodies (#MYC16-A) or anti-c-myc tag antibodies (#MYC13-A or #MYC14-M).

General References:

Gazin C et al (1984) EMBO J 3, 383-387; Colby WW (1983) Nature 301, 722-725; Rabbitts TH (1983) Nature 306, 760-765; Watson DK (1983) PNAS 80, 3642-3645

*This product is for In vitro research use only.

Other Fusion tag antibodies available from ADI

Anti-MBP, Poly-His, GST, beta-Gal, VSV-G, Flag, HA-tag,

Western Blot Recycling Kit (Strips blots in 5 minutes) and re-use the same blot with multiple antibodies

Alpha Diagnostic Intl Inc., 6203 Woodlake Center Dr, San Antonio, TX 78244, USA; **Email**: service@4adi.com

India Contact:

Life Technologies (India) Pvt. Ltd.

306, Aggarwal City Mall, Opposite M2K Pitampura, Delhi – 110034 (INDIA). Ph: +91-11-42208000, 42208111, 42208222, Mobile: +91-9810521400, Fax: +91-11-42208444
Email: customerservice@lifetechindia.com Website: www.lifetechindia.com