

Product Specification Sheet

Human c-Myc (fusion tag) Antibody Agarose, aff support

- Cat. MYC12-AS-250** Mouse monoclonal Anti-human c-myc epitope (fusion tag) IgG-agarose, aff support
SIZE: 250 ul (500 ul suspension)

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	Human c-myc peptide
Ab Host/type	Mouse, monoclonal, aff pure IgG1 # MYC12-M coupled to agarose (#MYC12-AS-250) affinity support supplied as 50% suspension (1:1 vol/vol) in PBS, Ph 7.4 and 0.05% azide
2-Ab	Goat Anti-mouse IgG-HRP conjugate Cat # 40320 (AP, biotin, FITC conjugates also available)
-ve	Cat # 20008-1, Mouse (non-immune) Serum IgG, purified, suitable for ELISA, Western, IHC as -ve control

Form & Storage of Antibodies/Peptide Control
Affinity support (agarose)

- 500 ul suspension (250 ul gel)
 - solution
- Buffer: PBS, pH 7.4, and 0.05% azide

Storage

Store at 4oC. Do not freeze.

Stability: 6-12 months at 4oC.

Recommended Usage

Anti-cMyc-IgG-Agarose may be used for immunoprecipitation and for affinity purification of fusion proteins containing cmyc fusion tags. The amounts of the matrix suitable for IP for any given fusion protein must be evaluated. The binding capacity of the column for the affinity purification of the fusion protein must also be evaluated for a given fusion protein.

Antibodies react with native and denatured myc-tag fusion protein or full length c-myc protein (MYC16-C) proteins. The antibodies detect the myc-tagged fusion proteins contain the tag at either the N or C-terminus. Full length c-myc contains T7-tag and His-tag at the N-terminus and migrates ~65 kda. MYC16-C control can be used as a control for antibodies to mc-myc protein or to anti-c-myc fusion tags.

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.

Related Items

Catalog# ProdDescription
 MYC11-A Rabbit Anti-c-Myc (fusion tag) epitope IgG #1, aff pure
 MYC11-C Recombinant purified Myc-tag -Protein (~9 kda) control
 WB +ve control
 MYC11-P c-myc fusion tag Control/blocking peptide #1
 MYC11-S Rabbit Anti-c-myc fusion tag peptide antiserum #1
 MYC12-AS-250 Mouse Monoclonal Anti-Human c-myc IgG (clone (E10)-Agarose conjugate
 MYC12-M Mouse Monoclonal Anti-Human c-myc IgG (clone (E10) unconjugated
 MYC13-A Anti-c-Myc epitope (fusion tag) IgG #3, aff pure
 MYC13-AS Anti-C myc (fusion tag) IgG-Agarose (aff matrix)
 MYC13-HRP Anti-c-Myc epitope (fusion tag) IgG-HRP conjugate
 MYC13-M discontd: Mouse Monoclonal Anti-Human c-myc IgG # 3
 MYC13-P c-myc fusion tag Control/blocking peptide #1
 MYC14-AP Mouse Monoclonal Anti-c-myc (fusion tag) IgG-AP conjugate
 MYC14-M Mouse Monoclonal Anti- c-myc (fusion tag) ascites # 4
 MYC15-AS renamed as cat #MYC13-AS
 MYC15-R Recombinant purified Myc-tag -Protein (~9 kda) control for ELISA
 MYC16-A Rabbit Anti-human c-myc protein IgG, aff pure
 MYC16-C Human recombinant purified His-tag c-myc protein (~65 kda) control
 MYC17-C Human recombinant purified His-tag c-myc protein (~65 kda) control
 MYC17-R-10 Human recombinant purified His-tag c-myc protein (~65 kda) control
 MYC17-R-50 Human recombinant purified His-tag c-myc protein (~65 kda) control

MYC12-AS-250

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