ALPHA DIAGNOSTIC INTERNATIONAL

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Product Specification Sheet

Recombinant Myc tag-Fusion Protein

Cat. MYC11-C	Recombinant purified Myc tag-Fusion protein control for WB	**SIZE**: 100 ul
Cat. MYC15-R	Recombinant purified Myc tag-Fusion protein for ELISA	**SIZE**: 100 ug

Expression of genes in E. coli or yeast or baculovirus offers a convenient system to produce large amounts of recombinant proteins that may otherwise be difficult to isolate from natural cells and tissues. Very often antibodies to these newly identified proteins are not available to study its biochemical properties, monitor protein expression, and purification. In order to circumvent this problem, short pieces of well-defined peptides (Poly-His, Flag-epitope or c-myc epitope or HA-tag) or small proteins (bacterial GST, MBP, Thioredoxin, b-Galactosidase, VSV-Glycoprotein etc) are often cloned along with the target gene. Proteins are expressed as fusion proteins. Antibodies to these fusion-tags are already available to monitor fusion protein expression and purification. Therefore, fusion-tags serve as universal tags much like secondary antibodies. Many tags have their own characteristics. Poly-His-fusion proteins (6 x His) can bind to Nickel-Sepharose or Nickel-HRP. GST-fusion proteins can bind to glutathione-Sepharose. Therefore, a high degree of purification of fusion protein can be achieved in just one affinity purification step. 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

Myc-tag represents a 10-aa peptide sequence (**designated MYC11-P; control/blocking** peptide) from human myc protein (aa 410-419 aa; EQK LIS EED L). The myc-tag was expressed as N-temrinal fusion protein of ~9.5 kDa in E. coli and purified to >95%. It is supplied for use in Western blot (Cat # MYC11-C) or for ELISA coating or other applications (Cat # MYC15-R).

MYC11-C protein for Western blot +ve control (Cat # MYC11-C) is supplied in SDS-PAGE sample buffer (reduced). Load 10 ul/lane of MYC11-C for good visibility with antibody Cat # MYC11-S or #MYC13-A or MYC14-M antibodies. The MYC11-C protein migrate as ~9.5 kda band. It will be necessary to have proper size gel (e.g., 10% or 4-10% for proper resolution of small protein. Store at –20oC in suitable size aliquots. SDS may crystallize in cold conditions. It should redissolve by warming and light mixing at room temperature. It should be heated once prior to loading on gels. If the product has been stored for several weeks, then it may be preferable to add 5 ul of fresh 2x sample buffer per 10 ul of the MYC11-C solution prior to heating and loading on gels. This preparation is not biologically active. It is not suitable for ELISA or other applications where native protein is required. This preparation is intended for qualitative purpose and not to serve as standard of known concentration. Do not freeze, thaw, or heat repeatedly.

The myc-tag was expressed as N-temrinal fusion protein of ~9.5 kDa in E. coli and purified to >95%. **Cat #MYC15-R** is supplied in PBS, pH 7.4 at 100 ug/100 ul in liquid or in powder. Reconstitute the powder in 100 ul PBS to prepare 1 mg/ml solution or other desired concentrations. Store stock solutions at –20oC or below in suitable size aliquots. Do not repeatedly freeze and thaw.

MYC15-R can be used in ELISA as coating protein at 1-5 ug/ml or used as positive control or standards in ELISA or used as myc-tag positive control in Western or other similar applications.

Related items available from ADI

#MYC11-A, Rabbit Anti-c-Myc (fusion tag) epitope IgG #1
#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

#MYC13-A, Rabbit Anti-c-Myc epitope (fusion tag) IgG #3, aff pure
#MYC13-AS, Anti-C myc (fusion tag) IgG-Sepharose (aff matrix)
#MYC13-HRP, Anti-c-Myc epitope (fusion tag) IgG-HRP conjugate

#MYC14-AP, Mouse Monoclonal Anti-c-myc tag IgG-AP conjugate
#MYC14-M, Mouse Monoclonal Anti- c-myc (fusion tag) ascites #

#MYC15-R, Recombinant, purified, Myc-tag- fusion Protein (~9 kda) control for ELISA 100 ug

Storage

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

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.

General References:

Gazin C et al (1984) EMBO J 3, 383-387; Tachibana K et al (1992) Gene, in press.

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

MYC11-C-15-R 71216A

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