ALPHA DIAGNOSTIC INTERNATIONAL

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Product Specification Sheet

Myc (fusion tag) Antibodies

Cat. MYC13-P	Myc tag control peptide	**SIZE**: 100 ug
Cat. MYC13-A	Rabbit Anti-Myc tag IgG (aff pure)	**SIZE**: 100 ug
Cat. MYC13-HRP	Rabbit Anti-Myc tag IgG-HRP Conjugate	**SIZE**: 100 ul

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

Antigen	10-aa peptide from human myc protein (aa 410-419 aa; EQK LIS EED L) Designa**ted (MYC13-P or control peptide)** conjugated to KLH; epitope location ~ C-terminus of Myc
Ab Host/type	Rabbit, Polyclonal IgG, purified over antigen-agarose (Cat # **MYC13**-A -A)
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

Cat# MYC13-HRP, HRP-conjugate

Purified antibody was coupled to HRP (RZ>3.0) using periodate method. The molar enzyme to protein (E/P) ratio = 4.0. The antibody is supplied in stabilizing buffer, 0.1% prolcin-300 as preservative in either **lyophilized** (0.1 ml) or **liquid** form (100 ul at 0.5-1 mg/ml). Reconstitute powder in PBS in 0.1 ml. Store at 4oC in suitable aliquots. Stability is ~6-12 months. Do not freeze and thaw.

Suggested conjugate dilutions are 1:1,000-1:10,000 ELISA, 1:1K-1:5K for western, and 1:200-1:1000 (IHC).

Form & Storage of Antibodies/Peptide Control

Affinity pure IgG

100 ug/100ul solution lyophilized powder

Supplied in **Buffer**: PBS+0.1% BSA

Reconstitute powder in PBS at 1mg/ml

Control/blocking peptide

100 ug/100 ul solution lyophilized powder

Supplied in Buffer: PBS pH 7.5,

Reconstitute powder in PBS at 1 mg/ml.

Storage

Short-term: unopened, undiluted liquid vials at -20OC and powder at 4oC or -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

Western Blotting (1-2 ug/ml using Chemiluminescence technique). Antibodies react with native and denatured myc-tag containing proteins. The antibodies detect the myc-tagged fusion proteins contain the tag at either the N or C-terminus. Recombinant human full length his-tag cMYC protein (#MYC16-C) or 9-kda Myc-tag containing protein (#MYC15-R) can also be used as positive protein controls for Western.

ELISA : 01-1 ug/ml using 50-100 ng control antigen/well).
Histochemistry & Immunofluorescence: not tested. We recommend the use of affinity pure antibody at 2-5 ug/ml.

Control peptide (cat #MYC13-P) , because of its small size, is not suitable for Western. It can be used to coat ELISA plates, dot blots, or used as antibody blocking peptide (use 10 ug peptide per ul/ug of antibody) to show antibody specificity.

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

#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

MYC13-A-P-HRP	71216A

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