

Product Specification Sheet

Anti-V5 Epitope fusion-Tag Antibody & Conjugate

Cat # V512-A	Rabbit Anti-V5 Epitope fusion-Tag IgG, aff pure	SIZE: 100 ug
Cat# MFPM52-C	Multi Fusion-Tagged recombinant Protein 52-Kda containing 16-tags for ELISA/Western	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. GST, HA-tag, C-myc, and His-tag are the most commonly used tags for recombinant fusion proteins.

A specially designed recombinant protein containing 16-commonly used fusion protein tags (**#MFPM52-C**, mol wt ~52 kda) was expressed in E. coli and semi-purified. Recombinant protein (52-kda) contains the following tags:

- Trx**
- T7:** M-A-S-M-T-G-G-Q-Q-M-G
- HSV** QPE LAP EDP EDC
- c-Myc:** E-Q-K-L-I-S-E-E-D-L
- VSV-G:** Y-T-D-I-E-M-N-R-L-G-K
- Glu-Glu:** CEE EEY MPM E
- V5:** GKP IPN PLL GLD ST
- E-tag** GAP VPY PDP LEP R
- Flag:** DYK DDD DK
- S-tag** KET AAA KFE RQH MDS
- HA-Tag** Y-P-Y-D-V-P-D-Y-A-C
- KT3:** KPP TPP PEP ET
- E2:** GVS STS SDF RDR
- AU1:** DTY RYI
- AU5:** TDF YLK
- His-Tag:** -H-H-H-H-H-H

Purified multi-tag fusion protein (**#MFPM52-C**) is supplied in a stabilizing buffer containing 0.1% Mannitol as powder in 100 ul/vial (~20-50 ug/ml). Store powder at 4oC for 6-12 months.

Source of Antibody and Conjugate

Antigen	GKPIPPELLGLDST (V5) synthetic peptide conjugated to KLH
Ab Host/type	Rabbit Polyclonal IgG Protein A/G purified (#V512-A) supplied in PBS, pH 7.4 and 0.1% azide
2-Ab	Goat Anti-rabbit IgG-HRP cat # 20320 (AP, biotin, FITC conjugates also available)
-ve control IgG	# 20009-1, Rabbit (non-immune) IgG, purified, suitable for ELISA, Western, IHC as -ve control

Form & Storage

Antibody supplied as 100 ug (or see lot sp. conc on the vial) or lyophilized preserved in 0.1% sodium azide. **Lyophilized products** should be reconstituted in 100 ul water and gently mixed for 15 min at room temp. All antibody received in solution or reconstituted from Lyophilized vials should be stored frozen at 4oC for 1 month or stored frozen at -20oC or below in suitable aliquots. It is not recommended to store diluted solutions. Avoid repeated freeze and thaw.

Recommended Usage

Western Blotting (1:1000-1:5000 using Chemiluminescence, ECL, technique). Antibodies react with native and denatured V5-tag containing proteins. Multi Fusion-Tagged recombinant Protein 52-Kda containing 16-tags for ELISA/Western can be used a positive control in Western. The picture on the left shows Western blot with V511-M antibody at 1 ug/ml using V5-tagged protein.

ELISA (1:10-50K; using 50-100 ng control antigen/well).

Histochemistry & Immunofluorescence: We recommend the use of affinity pure antibody at 10-50 ug/ml or enzyme conjugates at 1:200-1:2000 using 4% Paraformaldehyde fixed cells followed by 0.5% triton X-100. Picture on the left developed with V512-A antibody at 1 ug/ml and anti-rabbit IgG-Cy3 conjugate. Cells counterstained with DAPI.

Specificity & Cross-reactivity

Monoclonal Anti-V5 recognizes native and denatured-reduced forms of synthetic V5 or poly-V5-tagged fusion proteins in immunoblotting, dot blot and ELISA. The antibodies react with fusion protein expressed by prokaryotic pET, pRSET and pTrc expression vectors.

General References: Narayanan, S., J. Chromatogr., 658, 237 (1994), Casey, J., et al., J. Immunol. Meth., 179, 105 (1995), Uhlen, M., and Moks, T., Meth. Enzymol., 185, 129 (1990), Skerra, A., et al., Bio/Technology, 9, 273 (1991).
*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

Anti-Rabbit IgG-HRP Conjugate and ECL Reagents

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

V512-A-Anti-V5-Tag 150623A

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