ALPHA DIAGNOSTIC INTERNATIONAL

LIFE TECH Life Technologies™ Your Molecular & Cell Technology Partner

Product Specification Sheet

Recombinant Flag (Flag–tag) fusion Protein

Cat. FLAG12-C	Recombinant Flag-tag-Fusion protein (~10 Kda) for Western	**SIZE:** 100 ul
Cat. FLAG13-C	Recombinant Flag-tag-Fusion protein (~50 Kda) for Western	**SIZE:** 100 ul

Recombinant DNA technology allows the addition of short pieces of well-defined tags, "peptides" or proteins at the amino or c-terminus of target genes, which can provide 'affinity handles' designed to bind specific matrices. Therefore, tags enables a selective identification and purification of the protein of interest. Some common fusion tags include: **Flag**, **GST, His, Omni, HA, MBP, c-myc, GFP, etc.** Poly-His (His x 6) containing proteins can be purified by immobilized metal ion affinity chromatography (IMAC), making use of its high affinity for transition metal ions (1-4). This purification system eliminates the harsh conditions required to elute protein from ligand affinity columns. Numerous recombinant fusion proteins have been engineered with histidine tags to allow detection, isolation and purification of fusion proteins (1-4). Anti-poly his may be used to identify the expression of a poly-histidine fusion protein in bacteria, bacterial lysates or cells and tissues transfected with a poly-histidine fusion protein expression vectors.

Source of Antigen and Antibodies

An 8-aa peptide sequence (**DYK DDD DK**) was expressed as N-terminal fusion protein of ~10 kDa in E. coli and purified to >95%. It is supplied for use in Western blot (**Cat # FLAG12-C**) **+ve control.** It is supplied in SDS-PAGE sample buffer (reduced). Load 10 ul/lane of FLAG12-C for good visibility with appropriate ant-Flag antibodies. The FLAG12-C protein migrate as ~9-10 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 FLAG12-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.

An 8-aa peptide sequence (**DYK DDD DK**) was expressed as C-terminal fusion protein of ~50 kDa in E. coli and purified to >95%. It is supplied for use in Western blot (**Cat # FLAG13-C**) **+ve control.** It is supplied in SDS-PAGE sample buffer (reduced). Load 10 ul/lane of FLAG12-C for good visibility with appropriate ant-Flag antibodies. The FLAG12-C protein migrate as ~9-10 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 FLAG12-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.

Related items available from ADI

HA11-A, Rabbit Anti-Hemeagglutinin fusion (HA-tag) IgG
HA11-C, Recombinant, purified, HA-tag -Protein (~9 kda) control, WB +ve control
HA11-P, Hemeagglutinin fusion (HA-tag) blocking peptide#1
HA11-S, Rabbit Anti-Hemeagglutinin fusion (HA-tag) antiserum

HA12-A, Anti-Hemeagglutinin fusion epitope (HA-tag) IgG #2
HA12-AS, Anti-Hemeagglutinin fusion (HA-tag) IgG-Agarose
HA12-FITC, Anti-Hemeagglutinin fusion (HA-tag) IgG-FITC
HA12-HRP, Anti-Hemeagglutinin fusion (HA-tag) IgG-HRP
HA15-R, Recombinant, purified, HA-tag -Protein (~9 kda) control for ELISA

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.

Flag® is a registered trademark of Sigma.

Other Fusion tag antibodies available from ADI

Anti-MBP, Poly-His, GST, beta-Gal, VSV-G, HA-tag, and c-myc **Western Blot Recycling Kit (Strips blots in 5 minutes)** and re-use the same blot with multiple antibodies

FLAG13-C 10111A

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