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# **Product Information**

## p3XFLAG-Myc-CMV™-24 Expression Vector

Catalog Number E9283

### **Product Description**

The p3XFLAG-Myc-CMV-24 Expression Vector is a 4.7 kb derivative of pCMV5<sup>1</sup> used to establish transient, intracellular dual-tagged N-terminal Met-3XFLAGTM and C-terminal *c-myc* fusion proteins in mammalian cells. The vector encodes three adjacent FLAG® epitopes (Asp-Tyr-Lys-Xaa-Xaa-Asp) and a c-myc epitope (EQKLISEEDL)<sup>2</sup> upstream and downstream of the multiple cloning sites, respectively. The third FLAG epitope includes the enterokinase recognition sequence, allowing cleavage of the 3XFLAG peptide from the purified fusion protein. The incorporation of 3XFLAG in the expression vector results in increased detection sensitivity using ANTI-FLAG® M2 antibody.3 The promoter-regulatory region of the human cytomegalovirus drives transcription of FLAG and *c-myc* fusion constructs

p3XFLAG-Myc-CMV-24 Expression Vector is a shuttle vector for E. coli and mammalian cells. Efficiency of replication is optimal when using an SV40 T antigenexpressing host, such as COS cells.

The p3XFLAG-CMVTM-7-BAP Control Plasmid is a 6.2 kb derivative of pCMV5<sup>1</sup> used for transient intracellular expression of N-terminal 3X-FLAG bacterial alkaline phosphatase fusion protein in mammalian cells. The vector encodes three adjacent FLAG epitopes (Asp-Tyr-Lys-Xaa-Xaa-Asp) upstream of the multiple cloning region<sup>2</sup>. This results in increased detection sensitivity using ANTI-FLAG M2 antibody.3 The third FLAG epitope includes the enterokinase recognition sequence, allowing cleavage of the 3XFLAG peptide from the purified fusion protein.

The promoter-regulatory region of the human cytomegalovirus<sup>4</sup> drives transcription of FLAG-fusion constructs.

p3XFLAG-CMV-7-BAP Control Plasmid is a shuttle vector for E. coli and mammalian cells. Efficiency of replication is optimal when using an SV40 T antigenexpressing host, such as COS cells.

Map positions of key features in the p3XFLAG-Myc-CMV-24 Expression Vector and the p3XFLAG-CMV-7-BAP Control Plasmid can be found at www.sigma.com/vectormaps.

#### Components

- p3XFLAG-Myc-CMV-24 Expression Vector 20 μg Catalog Number E6151 Supplied as 0.5 mg/ml in 10 mM Tris-HCl, pH 8.0, 1 mM EDTA.
- p3XFLAG-CMV-7-BAP Control Plasmid 20 μg Catalog Number C7472 Supplied as 0.5 mg/ml in 10 mM Tris-HCl, pH 8.0, 1 mM EDTA.

#### **Precautions and Disclaimer**

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

#### Storage/Stability

Store at -20 °C

#### References

- 1. Andersson, S., et al., J. Biol. Chem., 264, 8222-8229 (1989)
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- Miceli, R.M., et al., J. Immunol. Methods, 167, 279-287 (1994)
- 4. Hernan, R., et al., Biotechniques, 28, 789-793
- 5. Campbell, A.M., et al., J. Biol. Chem., 267, 9321-9325 (1992)

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This product is covered by the following patents owned by Sigma-Aldrich Co. LLC: US6,379,903, US7,094,548, JP4405125,EP1220933, CA2386471 and AU774216.

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