

## Product Information

### p3XFLAG-CMV™-7.1 Expression Vector

Catalog Number **E7533**

Storage Temperature -20 °C

#### Product Description

The p3XFLAG-CMV-7.1 Expression Vector is a 4.7 kb derivative of pCMV5<sup>1</sup> used to establish transient intracellular expression of N-terminal 3XFLAG™ fusion proteins in mammalian cells. The vector encodes three adjacent FLAG® epitopes (Asp-Tyr-Lys-Xaa-Xaa-Asp) upstream of the multiple cloning region. This results in increased detection sensitivity using ANTI-FLAG® M2 antibody.<sup>2</sup> 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>3</sup> drives transcription of FLAG-fusion constructs.

The p3XFLAG-CMV-7.1 Expression Vector is a shuttle vector for *E. coli* and mammalian cells. Efficiency of replication is optimal when using an SV40 T antigen-expressing host, such as COS cells.

The p3XFLAG-CMV-7-BAP Control Plasmid is a 6.2 kb derivative of pCMV5<sup>1</sup> used for transient intracellular expression of N-terminal 3XFLAG 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.<sup>3</sup> 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 antigen-expressing host, such as COS cells.

**Map positions of key features in the p3XFLAG-CMV-7.1 expression vector and the p3XFLAG-CMV-7-BAP Control Plasmid can be found at**

**[www.sigma.com/vectormaps](http://www.sigma.com/vectormaps)**.

#### Components

- p3XFLAG-CMV-7.1 Expression Vector 20 µg  
Catalog Number E4026  
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, 1 mM EDTA, pH 8.0.

#### 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)
2. Herman, R., *et al.*, *Biotechniques*, **28**, 789-793 (2000)
3. Thomsen, D.R., *et al.*, *Proc. Natl. Acad. Sci. USA*, **81**, 659-663 (1984)
4. Miceli, R.M., *et al.*, *J. Immunol. Methods*, **167**, 279-287 (1994)

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