

Product Information

p3XFLAG-CMV™-10 Expression Vector

Catalog Number **E7658**

Product Description

The p3XFLAG-CMV-10 Expression Vector is a 6.3 kb derivative of pCMV5¹ used to establish transient or stable 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.² 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 cytomegalovirus³ drives transcription of FLAG-fusion constructs. The aminoglycoside phosphotransferase II gene (Neo) confers resistance to aminoglycosides such as G 418,⁴ allowing for selection of stable transfectants.

p3XFLAG-CMV-10 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 pCMV5¹ 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 region². 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 cytomegalovirus⁴ 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-10 Expression Vector and the p3XFLAG-CMV-7-BAP Control Plasmid can be found at www.sigma.com/vectormaps.

Components

- p3XFLAG-CMV-10 Expression Vector 20 µg
Catalog Number E4401
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)
2. Thomsen, D.R., *et al.*, *Proc. Natl. Acad. Sci. USA*, **81**, 659-663 (1984)
3. Miceli, R.M., *et al.*, *J. Immunol. Methods*, **167**, 279-287 (1994)
4. Hernan, R., *et al.*, *Biotechniques*, **28**, 789-793 (2000)
5. Jimenez, A. and Davies, J., *Nature*, **287**, 869-871 (1980)

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