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Product Information

pFLAG-Myc-CMV™-22 Expression Vector

Catalog Number **E9033**
Storage Temperature –20 °C

Product Description

The pFLAG-Myc-CMV-22 Expression Vector is a 6.3 kb derivative of pCMV5[1] used to establish transient or stable intracellular expression of dual-tagged N-terminal FLAG® and C-terminal *c-myc* fusion proteins in mammalian cells. The vector encodes the FLAG epitope (Asp-Tyr-Lys-Xaa-Xaa-Asp) and a *c-myc* epitope (EQKLISEEDL)[2] upstream and downstream of the multiple cloning sites, respectively.
The promoter-regulatory region of the human cytomegalovirus[3] drives transcription of FLAG and *c-myc* fusion constructs. The aminoglycoside phosphotransferase II gene (Neo) confers resistance to aminoglycosides such as G 418,[4] allowing for selection of stable transfectants.

pFLAG-Myc-CMV-22 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 pFLAG-CMV-4-BAP Control Plasmid is a 7.7 kb derivative of pCMV5[1] used for transient intracellular expression of N-terminal Met-FLAG bacterial alkaline phosphatase fusion protein in mammalian cells.

The promoter-regulatory region of the human cytomegalovirus[2] drives transcription of bacterial alkaline phosphatase. The amino glycoside phospho-transferase II gene[3] (Neo) confers resistance to aminoglycosides such as G 418.[4]

pFLAG-CMV-4-BAP Control Plasmid is a shuttle vector for *E. coli* and mammalian cells. Efficiency of replication and genomic integration is optimal when using an SV40 T antigen-expressing host, such as COS cells.

Map positions of key features in the pFLAG-Myc-CMV-22 Expression Vector and the pFLAG-CMV-4-BAP Control Plasmid can be found at
www.sigma.com/vectormaps .

Components

- pFLAG-Myc-CMV-22 Expression Vector 20 µg
  Catalog Number E5901
  Supplied as 0.5 mg/ml in 10 mM Tris-HCl, pH 8.0, 1 mM EDTA.

- pFLAG-CMV-4-BAP Control Plasmid 20 µg
  Catalog Number C4722
  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

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2. Thomsen, D. R., *et al.,* Cloning, structure, and expression of the mitochondrial cytochrome P-450 sterol 26-hydroxylase, a bile acid biosynthetic enzyme. *Proc. Natl. Acad. Sci. USA,* **81**, 659-663 (1984).
3. Brewer, C. B., Cytomegalovirus plasmid vectors for permanent lines of polarized epithelial cells. *Methods in Cell Biology*, **43**, 233-245 (1994).
4. Jimenez, A. and Davies, J., Expression of a transposable antibiotic resistance element in Saccharomyces. *Nature*, **287**, 869-871 (1980).
5. Campbell, A.M., et al. The alternative carboxyl termini of avian cardiac and brain sarcoplasmic reticulum/endoplasmic reticulum Ca(2+)-ATPases are on opposite sides of the membrane. *J. Biol. Chem.*, **267**, 9321-9325 (1992).

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