# **Episomal Mammalian Expression Vectors**

The Epstein Barr Virus (EBV)-based vectors are maintained extrachromosomally in primate and canine cell lines and will express high levels of recombinant proteins. This vector collection offers the following features:

- The EBV origin of replication (oriP) and nuclear antigen (EBNA-1) to allow high-copy episomal replication in primate and canine
- A choice of three selectable markers for stable maintenance of the vector.
- A choice of two enhancer-promoter sequences for high-level protein expression.
- ColE1 origin of replication and ampicillin resistance gene for growth and selection in E. coli.

## **Group I: Selectable Markers**

### Description:

This group of vectors, with high-level constitutive transcription from the RSV LTR, have different selectable markers for coexpression of recombinant proteins. This group includes the following:

- pREP4: Hygromycin resistance.
- pREP8: Histidinol resistance.
- pREP9: G418 (neomycin) resistance.

### Contents and Storage:

Vectors are supercoiled and provided lyophilized (-20°C). The appropriate E. coli stab and positive expression control are provided (RT). Vectors are guaranteed for 6 months following the date of shipment when stored correctly.

Description pREP4 pREP8	Quantity 20 µg 20 µg 20 µg	Cat. no. V004-50 V008-50 V009-50	Price \$200 \$200 \$200
pREP9	20 μg	V009-50	\$520
Set of 3	20 μg each	V489-10	

## Group II: Enhancer-Promoters

#### Description:

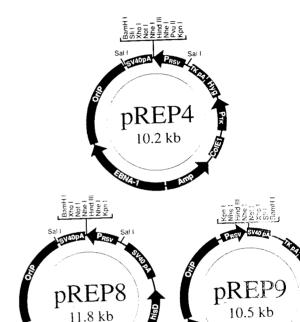
This pair of hygromycin resistant vectors offers different enhancer-promoter sequences for constitutive expression. This group includes the following:

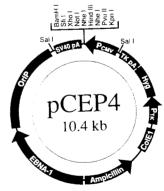
- pREP4: Rous sarcoma virus long terminal repeat (RSV LTR) promoter.
- pCEP4: Human cytomegalovirus (CMV) immediate-early gene enhancer-promoter.

## Contents and Storage:

Vectors are supercoiled and provided lyophilized (-20° C). The appropriate E. coli stab is provided (RT). Vectors are guaranteed for 6 months following the date of shipment when stored correctly.

Description	Quantity	Cat. no.	Price
Description	20 ug	V044-50	\$200
pCEP4	20 ug	V004-50	\$200
pREP4 Set of 2	20 μg	V440-10	\$345





See polylinker sequence of pCEP4 on page 108.

References (for EBV vectors): Yates, J. L. et al. (1985) Nature 313: 812-815 Sugden, B. et al. (1985) Mol. and Cell Bio. 5: 410-413. Margolskee, R. F. et al. (1988) Mol. and Cell Bio. 8: 2837-2847. Chittenden, T. et al. (1989) J. of Virology 63: 3016-3025.

#### pREP7 and pREP10

#### Description:

These hygromycin resistant vectors have multiple cloning sites in opposite orientations for the synthesis of sense and antisense RNA transcripts from the RSV LTR promoter. The vectors produce a truncated EBNA-1 protein for growth in cell lines sensitive to EBNA-1 toxicity.

#### Contents and Storage:

Vectors are supercoiled and provided lyophilized (- $20^{\circ}$ C). The appropriate *E. coli* stab and positive expression control are provided (RT). Vector is guaranteed for 6 months.

Description	Quantity	Cat. no.	Price
pREP7	20 μg	V007-50	\$200
pREP10	20 μg	V010-50	\$200
Set of 2	20 ug each	V710-50	S345

#### **Any Three EBV Vectors**

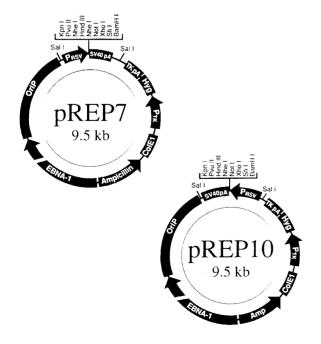
(Excluding pEBVHis)

#### Description:

Choose any three of Invitrogen's EBV vectors, including pCEP4, pREP4, pREP7, pREP8, pREP9, or pREP10 (excluding pEBVHis A, B, & C).

Description	Quantity	Cat. no.	Price
Any three vectors	20 ug each	V521-10*	\$520

<sup>\*</sup> When ordering, please specify the 3 vectors you have chosen.



#### pEBVHis A. B. & C

Episomal Xpress™ Vector

#### Description:

pEBVHis is a hygromycin resistant EBV episomal vector that expresses the protein of interest fused to an N-terminal peptide. Expressed protein can be purified in one step using Invitrogen's ProBond™ nickel-chelating resin (see page 10 for details). pEBVHis A, B, & C offer the following features:

- Expression from the RSV LTR promoter.
- Fusion to an N-terminal peptide for one-step purification with ProBond™ resin.
- Multiple cloning sites in three different reading frames for insertion of the gene of interest in frame with the N-terminal peptide.

See page 9 for the complete pEBVHis Xpress<sup>™</sup> Kit.

#### Contents and Storage:

Vectors are supercoiled and provided lyophilized ( $\cdot 20^{\circ}$ C). The appropriate *E. coli* stab and positive expression control are provided (RT). Vector is guaranteed for 6 months.

Description	Quantity	Cat. no.	Price
pEBVHis A, B, & C	20 μg each	V380-20	\$275



See polylinker sequence on page 112.