Product Information Sheet

Order: # PBBR01 & PBBR02

Broad Host Range Vectors pBBR122 and pBHR1

SUMMARY

shipped at RT; store at 4 °C

Product Description and Application

- expression in bacteria other than *E. coli* (mainly Gram-negative)
- change of bacterial host
- studies of broad-host-range replicons
- studies of Gram-negative bacteria

Introduction

The plasmid pBBR122 is a cloning vector with very broad-host-range maintenance properties. As opposed to other known broad-host-range vectors, it replicates at medium copy numbers and has a small size (5304 bp). This greatly facilitates genetic studies of a wide variety of Gram-negative bacteria and makes pBBR122 particularly interesting for studies of broad-host-range replicons. Being a versatile expression vector, it stably replicates in all Gram-negative organisms tried so far under standard growth conditions using the appropriate selective pressure. pBBR122 was derived from pBBR1, which was isolated from *Bordetella bronchiseptica* S87[5]. It is compatible with other broad-host-range vectors, since it does not belong to any of the broad-host-range incompatibility groups IncP, IncQ or IncW.

Genetic information: pBBR122 is neither mobilizable nor conjugative. Rep is the gene involved in replication. By removing a frame shift in the mob gene of pBBR122, pBHR1 was created. This new mobilizable vector is now available as well.

Replicate In:

- *Aeromonas caviae*
- *Aeromonas hydrophila*
- *Acetobacter xylinum*
- *Aeromonas veronii biovar sobria*
- *Agrobacterium tumefaciens*
- *Alcaligenes eutrophus*
- *Azorizobium caulinodans*
- *Bartonella bacilifonis*
- *Bordetella spp*
- *Brucela spp*
- *Caulobacter crescentus*
- *Escherichia coli*
- *Hyphomicrobium denitrificans*
- *Hyphomicrobium facilis*
- *Methylobacilus glyocogenes*
- *Methylbacterium extorquens*
- *Methylophilus methylotrophus*
- *Pseudomonas syringae*
- *Pseudomonas (Burkholderia) solanacearum*
- *Paracoccus denitrificans*
- *Pseudomonas fluorescens*
- *Pseudomonas putida*
- *Rhizobium meliloti*
- *Rhizobium leguminosarum*
- *Rhodobacter sphaeroides*
- *Salmonela typhimurium*
- *Vibrio cholerae*
- *Xanthomonas campestris*
- *and potentially many more!*

Note: *The organisms, which have been used in combination with pBBR122 are listed on this page. We assume, that pBBR122 and pBHR1 replicate in many more organisms than tested so far. If you have tested pBBR122 in an organism, which is not on the list, we would appreciate your feedback. Thank you!*

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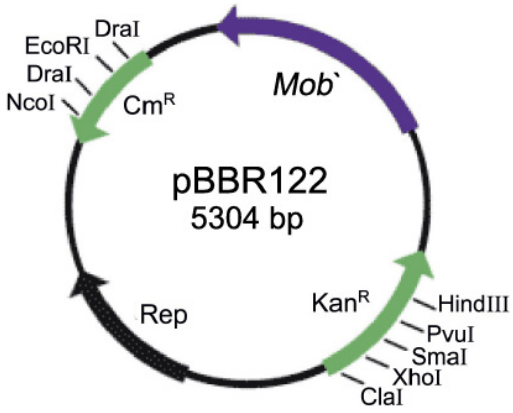
Broad Host Range Vectors pBBR122 and pBHR1

The vector pBBR122 has been developed by Dr. Camille Locht, Inst. Pasteur, France. The vector pBHR1 has been developed by the Laboratoire de Génétique des Procaryotes: Dr. Michael Faelen, Philippe Gabant and Cédric Szpirer. It is commercialized under non-exclusive license granted by the Université Libre de Bruxelles, Belgium.

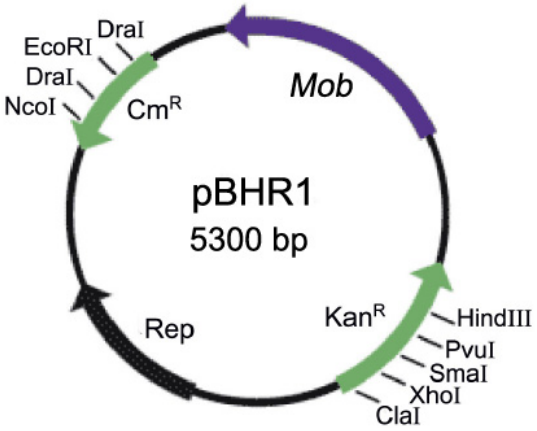
Vector Maps



Map of pBBR122

Cm^R: chloramphenicol resistance;
Kan^R: kanamycin resistance;
Rep: replication.
Mob`: frame shift mutation

Restriction sites within the marker genes are indicated.



Map of pBHR1

Cm^R: chloramphenicol resistance;
Kan^R: kanamycin resistance;
Rep: replication;
Mob: mobilization.

Restriction sites within the marker genes are indicated.

References

Antonie, R. & Locht, C., *Mol. Microbiol*. 6, 13 (1992) 1785-1799

Elzer, P.H. *et al*., *Plasmid* 33 (1995) 51-57

Kovach, M.E. *et al*., *Bio Techniques* 16, 5 (1994) 800-802

Kovach, M.E. *et al*., *Gene* 166 (1995) 175-176

Renauld-Mongènie, G. *et al*., *Bacteriol*. 178 (1996) 1053-1060

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Order: # PBBR01 & PBBR02

Broad Host Range Vectors pBBR122 and pBHR1

Order Information, Shipping and Storage

Order#	Product	Quantity
PBBR01	pBBR122 Broad Host Range Vector, lyophilized DNA	5 µg
PBBR02	pBHR1 vector DNA (mobilizable), lyophilized	5 µg
shipped at RT; store at 4 °C		

Contact and Support

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