This is a cloning vector that allows mobilization into a wide range of Gram- and Gram+ bacteria. After mobilization, the plasmid can be maintained by integration into the host chromosome via homologous recombination. Excision of the intervening plasmid sequence by a double cross-over event can be facilitated by selection on medium containing 10% sucrose. The sacB gene has been modified to eliminate the HindIII and EcoRI sites in the coding region. This vector differs from pK18mobsacB (ATCC# 87097) only in the orientation of the polylinker.

Designation: pK19mobsacB plasmid in E. coli SCS110

Distribution Host: Escherichia coli SCS110

1. Open vial according to instructions.
2. Aseptically add 0.3 to 0.4 mL of liquid medium to the freeze-dried pellet and mix well. Transfer 100 µL to a test tube containing 5 mL LB+ kanamycin (50 µg/mL). A loopful of culture can also be streaked on an agar plate of the same. Incubate cultures at 37°C.
3. Isolate DNA using standard plasmid preparation procedures.

Growth Conditions
Temperature: 37°C
Medium
ATCC Medium 1065 (see below) plus kanamycin (50 mcg/ml) ATCC Medium 1065: Tryptone (Difco 0123), 10.0 g; Yeast Extract (Difco 0127), 5.0 g; NaCl, 10.0 g; Distilled water, 1.0 L

Construct size (kb): 5.66
Marker(s): kanR, sacB

Vector type: plasmid
Cloning sites: HindIII SphI PstI XbaI Smal EcoRI
Construction: pK19, pSUP102 (RP4 mob) sacB; the sacB gene was inserted into the pK19mob vector.
Insert: sacB
Genome: Bacillus subtilis
Gene name: levansucrase
Insert end: Ecl136II
Insert end: XbaI (modification: blunt ended)
Insert size (kb): 1.9
Complete coding sequence?: Y

Vector: pK19mob
Vector size (kb): 3.76
Type of vector: plasmid
Vector ends: AsuII (modification: blunt ended)

Host range: Escherichia coli; Salmonella sp.; Serratia sp.
Features (with orientation and location, if known):
Marker: kanR
Marker: sacB (sucrose sensitivity)
Other: oriT
Other: oriV
Insert detection: lacZ',
MCS: HindIII….EcoRI

References
References and other information relating to this product are available online at www.atcc.org.

Notes
Restriction digests of the clone gave the following sizes (in kb): EcoRI 5.6; HindIII 5.6; PstI 5.6.
-ATCC Staff
Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the current publication of the Biosafety in Microbiological and Biomedical Laboratories from the U.S. Department of Health and Human Services Centers for Disease Control and Prevention and National Institutes for Health.

ATCC Warranty

The viability of ATCC® products is warranted for 30 days from the date of shipment, and is valid only if the product is stored and cultured according to the information included on this product information sheet. ATCC lists the media formulation that has been found to be effective for this strain. While other, unspecified media may also produce satisfactory results, a change in media or the absence of an additive from the ATCC recommended media may affect recovery, growth and/or function of this strain. If an alternative medium formulation is used, the ATCC warranty for viability is no longer valid.

Disclaimers

This product is intended for laboratory research purposes only. It is not intended for use in humans. While ATCC uses reasonable efforts to include accurate and up-to-date information on this product sheet, ATCC makes no warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. ATCC does not warrant that such information has been confirmed to be accurate.

This product is sent with the condition that you are responsible for its safe storage, handling, and use. ATCC is not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to insure authenticity and reliability of strains on deposit, ATCC is not liable for damages arising from the misidentification or misrepresentation of cultures. Please see the enclosed Material Transfer Agreement (MTA) for further details regarding the use of this product. The MTA is also available on our Web site at www.atcc.org

Additional information on this culture is available on the ATCC web site at www.atcc.org.

© ATCC 2018. All rights reserved. ATCC is a registered trademark of the American Type Culture Collection. [07/11]