pTMB120

45054™

Description

Organism: Cowpea mosaic comovirus
Clone type: Clone
Host: *Escherichia coli* HB101 (ATCC 33694)
Shipping information: *Escherichia coli* HB101 containing the plasmid

Storage Conditions

Product format: Freeze-dried

Intended Use

This product is intended for laboratory research use only. It is not intended for any animal or human therapeutic use, any human or animal consumption, or any diagnostic use.

BSL 1

ATCC determines the biosafety level of a material based on our risk assessment as guided by the current edition of *Biosafety in Microbiological and Biomedical Laboratories (BMBL)*, U.S. Department of Health and Human Services. It is your responsibility to understand the hazards associated with the material per your organization's policies and procedures as well as any other applicable regulations as enforced by your local or national agencies.

Certificate of Analysis

For batch-specific test results, refer to the applicable certificate of analysis that can be found at www.atcc.org.

Insert Information

Insert size (kb): 4.2000000000000002
Gene product: 24K protease [VP23]

Vector Information

Construct size (kb): 6.6
Vector name: pT7-5
Vector information:
Name of Clone: pTMB120
Other names:
Gene symbol: VP23, VP37
Insert contains: coat protein (23 kDA), 24K protease, coat protein (38 kDA)
Cloned from: cowpea mosaic virus yellow strain, sb
Detects sequence: Cowpea mosaic virus VP23, MRNA; cowpea mosaic virus B RNA; cowpea mosic virus VP37, MRNA
Insert site(s): BamHI, ClaI
Insert ends: PvuII, ClaI
Markers: ampR

Growth Conditions

Medium:
ATCC Medium 1227: LB Medium (ATCC medium 1065) with 50 mcg/ml ampicillin
Temperature: 37°C

Notes

Major processing products are polypeptides of 100 kDa, 77 kDA, 60 kDA (capsid precursor), 38 kDA (VP37), 24 kDA (24K protease), and VP23.
-Nucleic Acids Res. 16: 1967-1985, 1988

Combines coding sequences for the B RNA 24K protease and the two M RNA-encoded capsid proteins into a single long open reading frame. Includes signals for the two cleavage sites to release these proteins.
-Nucleic Acids Res. 16: 1967-1985, 1988

Transcription *in vitro* using T7 RNA polymerase and translation of the product in reticulocyte lysates yields a primary translation product of 140 kDA.
-Nucleic Acids Res. 16: 1967-1985, 1988

The BamHI/ClaI fragment of pTB114delta3 (positions 3857 to polyA tail of B RNA) was replaced with a PvuII/ClaI fragment of pTM203 (positions 699 to 3' end of M RNA). The BamHI site was filled in.
-Nucleic Acids Res. 16: 1967-1985, 1988

Restriction digests of the clone give the following sizes (kb): ClaI - 6.6; ClaI/BamHI - 2.75, 2.0, 0.96, 0.73; BamHI - 4.90, 0.96, 0.73; EcoRI - 6.6; SalI - 6.6.
-ATCC staff

Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: pTMB120 (ATCC 45054)

References

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

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