



LOCUS Exported 2958 bp ds-DNA circular SYN 04-
 JAN-2013
 DEFINITION Standard cloning vector (phagemid excised from lambda ZAP).
 The f1
 (-) orientation allows rescue of antisense strand ssDNA.
 ACCESSION X52324
 VERSION .
 KEYWORDS pBluescript SK(-)
 SOURCE synthetic DNA construct
 ORGANISM synthetic DNA construct
 REFERENCE 1 (bases 1 to 2958)
 AUTHORS Short JM, Fernandez JM, Sorge JA, Huse WD.
 TITLE Lambda ZAP: a bacteriophage lambda expression vector with in
 vivo
 excision properties
 JOURNAL Nucleic Acids Res. 16 (15), 7583-7600 (1988)
 PUBMED 2970625
 REFERENCE 2 (bases 1 to 2958)
 AUTHORS Stratagene
 TITLE Direct Submission
 JOURNAL Exported Wednesday, Feb 17, 2016 from SnapGene 3.0.3
 http://www.snapgene.com
 FEATURES Location/Qualifiers

```
source          1..2958
                /organism="synthetic DNA construct"
                /lab_host="Escherichia coli"
                /mol_type="other DNA"
rep_origin      7..462
                /direction=RIGHT
                /note="f1 ori"
                /note="f1 bacteriophage origin of replication; arrow
                indicates direction of (+) strand synthesis"
CDS             complement(454..816)
                /codon_start=1
                /gene="lacZ fragment"
                /product="LacZ-alpha fragment of beta-galactosidase"
                /note="lacZ-alpha"

/translation="MTMITPSSKLTTLTKGNKSWSSSTAVAAALELVDPPGCRNSISSLSI
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DRPSQQLRSLNGEWKL"
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                /note="M13 fwd"
                /note="common sequencing primer, one of multiple
similar
                variants"
promoter       626..644
                /note="T7 promoter"
                /note="promoter for bacteriophage T7 RNA polymerase"
misc_feature   653..760
                /note="MCS"
                /note="pBluescript multiple cloning site"
primer_bind    670..686
                /note="KS primer"
                /note="common sequencing primer, one of multiple
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primer_bind    complement(720..736)
                /note="SK primer"
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                variants"
promoter       complement(773..791)
                /note="T3 promoter"
                /note="promoter for bacteriophage T3 RNA polymerase"
primer_bind    complement(812..828)
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                variants"
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                /note="lac operator"
                /note="The lac repressor binds to the lac operator
to
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inhibit transcription in E. coli. This inhibition
can be
relieved by adding lactose or
isopropyl-beta-D-thiogalactopyranoside (IPTG)."
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/note="lac promoter"
/note="promoter for the E. coli lac operon"
rep_origin complement (1214..1802)
/direction=LEFT
/note="ori"
/note="high-copy-number ColE1/pMB1/pBR322/pUC origin
of
replication"
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/note="AmpR"
/note="confers resistance to ampicillin,
carbenicillin, and
related antibiotics"

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promoter complement (2834..2938)
/gene="bla"
/note="AmpR promoter"

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