



LOCUS Exported 4109 bp ds-DNA circular SYN 17-FEB-2016

DEFINITION Vector for cloning, sequencing, and bacterial expression of cDNAs.

ACCESSION U12390

VERSION .

KEYWORDS pSPORT 1

SOURCE synthetic DNA construct

ORGANISM synthetic DNA construct

REFERENCE 1 (bases 1 to 4109)

AUTHORS Invitrogen (Life Technologies)

TITLE Direct Submission

JOURNAL Exported Wednesday, Feb 17, 2016 from SnapGene 3.0.3
<http://www.snapgene.com>

FEATURES Location/Qualifiers

source 1..4109
 /organism="synthetic DNA construct"
 /lab_host="Escherichia coli"
 /mol_type="other DNA"

promoter complement(523..627)
 /gene="bla"

rep_origin complement(654..1109)
 /note="AmpR promoter"
 /direction=LEFT

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        /note="f1 ori"
        /note="f1 bacteriophage origin of replication; arrow
        indicates direction of (+) strand synthesis"
    CDS      complement(1086..1451)
            /codon_start=1
            /product="LacZ-alpha fragment of beta-galactosidase"
            /note="lacZ-alpha"

/translation="MTMITPSSNTTHYRESWYACRYRSGIPGSTSSLVGGRSRGSKLTY
ACMRRHSSSIVSPKFNSLAVVLQRRDWENPGVTQLNRLAAHPPFASWRNSEEARTDRPS
    primer_bind  QQLRSLNGEWTRPVAAH"
                1250..1266
                /note="M13 fwd"
                /note="common sequencing primer, one of multiple
similar
                variants"
    promoter     1274..1292
                /note="SP6 promoter"
                /note="promoter for bacteriophage SP6 RNA
polymerase"
    misc_feature 1301..1396
                /note="MCS"
                /note="multiple cloning site"
    promoter     complement(1410..1428)
                /note="T7 promoter"
                /note="promoter for bacteriophage T7 RNA polymerase"
    primer_bind  complement(1447..1463)
                /note="M13 rev"
                /note="common sequencing primer, one of multiple
similar
                variants"
    protein_bind 1471..1487
                /bound_moiety="lac repressor encoded by lacI"
                /note="lac operator"
                /note="The lac repressor binds to the lac operator
to
                inhibit transcription in E. coli. This inhibition
can be
                relieved by adding lactose or
    promoter     isopropyl-beta-D-thiogalactopyranoside (IPTG)."
                complement(1495..1525)
                /note="lac promoter"
                /note="promoter for the E. coli lac operon"
    CDS          complement(1574..2656)
                /codon_start=1
                /gene="lacI"
                /product="lac repressor"
                /note="lacI"
                /note="The lac repressor binds to the lac operator
to
                inhibit transcription in E. coli. This inhibition
can be
                relieved by adding lactose or

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isopropyl-beta-D-thiogalactopyranoside (IPTG)."

```
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EDGTRLGVEHLVALGHQQIALLAGPLSSVSARLRLAGWHKYLTRNQIQPIAEREGDWSA
MSGFQQTMQMLNEGIVPTAMLVANDQMALGAMRAITESGLRVGADISVVGYYDDTEDSSC
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promoter complement (2657..2734)
/gene="lacI"
/note="lacI promoter"
rep_origin complement (3012..3600)
/direction=LEFT
/note="ori"
/note="high-copy-number Cole1/pMB1/pBR322/pUC origin
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of

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replication"
CDS complement (3771..522)
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/gene="bla"
/product="beta-lactamase"
/note="AmpR"
/note="confers resistance to ampicillin,
carbenicillin, and
related antibiotics"
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LIKHW"
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ORIGIN

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