



LOCUS Exported 2961 bp ds-DNA circular SYN 18-  
 JUN-2015  
 DEFINITION Standard cloning vector (phagemid excised from lambda ZAPII).  
 The f1  
 (+) orientation allows rescue of sense strand ssDNA.  
 ACCESSION X52328  
 VERSION .  
 KEYWORDS pBluescript II SK(+)  
 SOURCE synthetic DNA construct  
 ORGANISM synthetic DNA construct  
 REFERENCE 1 (bases 1 to 2961)  
 AUTHORS Altling-Mees MA, Short JM.  
 TITLE pBluescript II: gene mapping vectors.  
 JOURNAL Nucleic Acids Res. 1989;17:9494.  
 PUBMED 2555794  
 REFERENCE 2 (bases 1 to 2961)  
 AUTHORS .  
 TITLE Direct Submission  
 JOURNAL Exported Wednesday, Feb 17, 2016 from SnapGene 3.0.3  
 http://www.snapgene.com  
 FEATURES Location/Qualifiers  
 source 1..2961  
 /organism="synthetic DNA construct"

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        /lab_host="Escherichia coli"
        /mol_type="other DNA"
rep_origin complement(3..458)
        /direction=LEFT
        /note="f1 ori"
        /note="f1 bacteriophage origin of replication; arrow
        indicates direction of (+) strand synthesis"
CDS complement(241..816)
        /codon_start=1
        /gene="lacZ fragment"
        /product="LacZ-alpha fragment of beta-galactosidase"
        /note="lacZ-alpha"

/translation="MTMITPSAQLTLTKGNKSWSSSTAVAAALELVDPPGCRNSISSLSI
PSTSRGGPVPNSPYSESYARSLAVVLQRRDWENPGVTQLNRLAAHPPFASWRNSEEAR
TDRPSQQLRSLNGEWDAPCSGALSAAGVVVTRSVTATLASALAPAPFAFFPSFLATFAG
FPRQALNRGLPLGFRFSALRHLDPKKLD"
        primer_bind 600..616
        /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
similar
        variants"
        primer_bind complement(720..736)
        /note="SK primer"
        /note="common sequencing primer, one of multiple
similar
        variants"
        promoter complement(773..791)
        /note="T3 promoter"
        /note="promoter for bacteriophage T3 RNA polymerase"
        primer_bind complement(812..828)
        /note="M13 rev"
        /note="common sequencing primer, one of multiple
similar
        variants"
        protein_bind 836..852
        /bound_moiety="lac repressor encoded by lacI"
        /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)."
promoter complement (860..890)
/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"
CDS complement (1973..2833)
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/product="beta-lactamase"
/note="AmpR"
/note="confers resistance to ampicillin,
carbenicillin, and
related antibiotics"

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

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