



LOCUS Exported 4938 bp ds-DNA circular SYN 17-
 FEB-2016
 DEFINITION Donor vector for transferring a cloned gene into an acceptor
 vector,
 and for tagging the gene, using Cre recombinase in the
 Creator (TM)
 system.
 ACCESSION .
 VERSION .
 KEYWORDS pDNR-Dual
 SOURCE synthetic DNA construct
 ORGANISM synthetic DNA construct
 REFERENCE 1 (bases 1 to 4938)
 AUTHORS Clontech
 TITLE Direct Submission
 JOURNAL Exported Wednesday, Feb 17, 2016 from SnapGene 3.0.3
<http://www.snapgene.com>
 FEATURES Location/Qualifiers
 source 1..4938
 /organism="synthetic DNA construct"
 /lab_host="Escherichia coli"
 /mol_type="other DNA"
 protein_bind 9..42

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        /bound_moiety="Cre recombinase"
        /note="loxP"
        /note="Cre-mediated recombination occurs in the 8-bp
core
        sequence (GCATACAT)."
    misc_feature 45..129
        /note="MCS"
        /note="multiple cloning site"
    misc_feature 133..135
        /note="stop"
        /note="stop codon"
    CDS 141..176
        /codon_start=1
        /product="6x(His-Asn) affinity tag"
        /note="6xHN"
        /translation="HNHNHNHNHNHNHN"
    misc_feature 143..145
        /note="stop"
        /note="stop codon"
    misc_feature 177..179
        /note="stop"
        /note="stop codon"
    terminator 212..306
        /note="lambda t0 terminator"
        /note="transcription terminator from phage lambda"
    CDS complement(327..986)
        /codon_start=1
        /gene="cat"
        /product="chloramphenicol acetyltransferase"
        /note="CmR"
        /note="confers resistance to chloramphenicol"

/translation="MEKKITGYTTVDISQWHRKEHFQAFQSVQCTYNQTVQLDITAFI
KTVKKNKHKFYPAFIHILARLMNAHPEFRMAMKDGELVIWDSVHPCYTVFHEQTETFS
LWSEYHDDFRQFLHIYSQDVACYGENLAYFPKGFIEENMFFVSANPWVSFTSFDLNVANM
DNFFAPVFTMGKYYTQGDKVLMPLAIQVHHA VCDGFHVGRMLNELQQYCDEWQGGGA"
    protein_bind 1015..1048
        /bound_moiety="Cre recombinase"
        /note="loxP"
        /note="Cre-mediated recombination occurs in the 8-bp
core
        sequence (GCATACAT)."
    gene 1063..2966
        /gene="Bacillus subtilis sacB"
        /product="secreted levansucrase that renders
bacterial
        growth sensitive to sucrose"
        /note="sacB"
        /note="negative selection marker"
    CDS 1509..2930
        /codon_start=1

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        /gene="Bacillus subtilis sacB"
        /product="secreted levansucrase that renders
bacterial
        growth sensitive to sucrose"
        /note="sacB"
        /note="negative selection marker"

/translation="MNIKKFAKQATVLTFTTALLAGGATQAFAKETNQKPYKETYGISH
ITRHDMLQIPEQQKNEKYQVPEFDSSTIKNISSAKGLDVWDSWPLQNADGTVANYHGYH
IVFALAGDPKNADDTSIYMFYQKVGETSIDSWKNAGRNVFKSDKFDANDSILKDQTQEW
SGSATFTSDGKIRLFYTDVDFSGKHYGKQTLTTAQVNVASDSSLNINGVEDYKSIFDGDG
KTYQNVQQFIDEGNYSSGDNHTLRDPHYVEDKGHKYLVEANTGTEDGYQGEESLFNKA
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IERANVFKMNGKWYLFVTDVSRGSKMTIDGITSNDIYMLGYVSNVSLTGPYKPLNKTGLVLK
MDLDPNDVTFYSHFAVPQAKGNNVVITSYMTNRGFYADKQSTFAPSLLNIKGKKTSV
        VKDSILEQQQLTVNK"
        promoter      2998..3102
        /gene="bla"
        /note="AmpR promoter"
        CDS           3103..3963
        /codon_start=1
        /gene="bla"
        /product="beta-lactamase"
        /note="AmpR"
        /note="confers resistance to ampicillin,
carbenicillin, and
        related antibiotics"

/translation="MSIQHFRVALIPFFAAFLPVFPAHPETLVKVKDAEDQLGARVGYI
ELDLNSGKILESFRPEERFPMMSSTFKVLLCGAVLSRIDAGQEQLGRRIHYSQNDLVEYS
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LPAGWFIADKSGAGERGSRGIIAALGPDGKPSRIVVIYTTGSQATMDERNRQIAEIGAS
        LIKHW"
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        /direction=RIGHT
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        /note="high-copy-number ColE1/pMB1/pBR322/pUC origin
of
        replication"
        primer_bind   4839..4855
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                 /note="promoter for bacteriophage T7 RNA polymerase"
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cacaactagc
181  ctaggagatc  ctggatcatg  ctagtgcttg  gattctcacc  aataaaaaac
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