

Supporting Information. Annotation and sequence of pZE31-*tetR*-*batIM* in Genbank format.

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LOCUS       Exported                               3708 bp ds-DNA   circular SYN 21-JAN-2022
DEFINITION synthetic circular DNA
ACCESSION   .
VERSION     .
KEYWORDS    .
SOURCE      synthetic DNA construct
  ORGANISM  synthetic DNA construct
REFERENCE   1 (bases 1 to 3708)
AUTHORS     CZC, Hokkaido University
TITLE       Direct Submission
JOURNAL     Exported Friday, Jan 21, 2022 from SnapGene 5.0.8
            https://www.snapgene.com
FEATURES             Location/Qualifiers
     source           1..3708
                     /organism="synthetic DNA construct"
                     /mol_type="other DNA"
     promoter         7..80
                     /label=PLtetO-1 promoter
                     /note="modified phage lambda PL promoter with tet operator
                     sites (Lutz and Bujard, 1997)"
     protein_bind     7..25
                     /gene="tetO"
                     /label=tet operator
                     /bound_moiety="tetracycline repressor TetR"
                     /note="bacterial operator O2 for the tetR and tetA genes"
     protein_bind     32..50
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                     /note="bacterial operator O2 for the tetR and tetA genes"
     CDS              112..891
                     /codon_start=1
                     /locus_tag="AW20_RS24270"
                     /old_locus_tag="AW20_4689"
                     /product="DNA methylase"
                     /label=batIM
                     /note="Derived by automated computational analysis using
                     gene prediction method: Protein Homology."
                     /inference="COORDINATES:same species:RefSeq"
                     /protein_id="WP_000286272.1"
                     /translation="MYRSKESGLKMLDLCSGIAGISMAADWAGIDTAAAFCEIEEFNQKV
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                     YRTFIVGHSNDKSKLQTDPRVVPFRSKWETWENTTGINRGTLSGTYWEENKPAICGMD
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     terminator       916..1002
                     /gene="Escherichia coli rrnB"
                     /label=rrnB T1 terminator
                     /note="transcription terminator T1 from the E. coli rrnB
                     gene"
     rep_origin        complement(1167..1755)
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                     /label=ori
                     /note="high-copy-number ColE1/pMB1/pBR322/pUC origin of
                     replication"
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                     /gene="Escherichia coli rrnB"
                     /label=rrnB T1 terminator

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/note="transcription terminator T1 from the E. coli rrnB
gene"
CDS complement(1988..2611)
/codon_start=1
/gene="tetR from transposon Tn10"
/product="tetracycline repressor TetR"
/label=TetR
/note="TetR binds to the tetracycline operator tetO to
inhibit transcription. This inhibition can be relieved by
adding tetracycline or doxycycline."
/translation="MSRLDKSKVINSALELLNEVGIEGLTTRKLAQKLGVEQPTLYWHV
KNKRALLDALAIEMLDHRHHTFCEPLEGESWQDFLRNNAKSFRCALLSHRDGAKVHLGTR
PTEKQYETLENQLAFLCQQGFSLENALYALSAVGHFTLGCVLEDQEHQVAKEERETPTT
DSMPPLLRQAIELFDHQGAEPAFLEGLLELIICGLEKQLKCESGS"
RBS 2618..2629
/note="strong bacterial ribosome binding site (Elowitz and
Leibler, 2000)"
terminator 2733..2827
/label=lambda t0 terminator
/note="transcription terminator from phage lambda"
CDS complement(2848..3507)
/codon_start=1
/gene="cat"
/product="chloramphenicol acetyltransferase"
/label=CmR
/note="confers resistance to chloramphenicol"
/translation="MEKKITGYTTVDISQWHRKEHFQSVQCTYNQTVQLDITAFLL
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promoter complement(3508..3610)
/label=cat promoter
/note="promoter of the E. coli cat gene encoding
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