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LOCUS       Exported                               12470 bp ds-DNA   circular SYN 06-
NOV-2020
DEFINITION  synthetic circular DNA.
ACCESSION   .
VERSION     .
KEYWORDS    pACT-All-EFS-Blasticidin
SOURCE      synthetic DNA construct
  ORGANISM  synthetic DNA construct
REFERENCE   1 (bases 1 to 12470)
  AUTHORS   Transomic
  TITLE     Direct Submission
  JOURNAL   Exported Friday, Nov 6, 2020 from SnapGene 5.2.1
            https://www.snapgene.com
FEATURES             Location/Qualifiers
     source           1..12470
                     /organism="synthetic DNA construct"
                     /mol_type="other DNA"
     misc_feature     23..667
                     /label=CMV-LTR
  
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                  /label=HIV-1 Psi
                  /note="packaging signal of human immunodeficiency
                  virustype1"
misc_feature      1333..1566
                  /label=RRE
                  /note="The Rev response element (RRE) of HIV-1
allows for
                  Rev-dependent mRNA export from the nucleus to the
                  cytoplasm."
misc_feature      2093..2210
                  /label=cPPT/CTS
                  /note="central polypurine tract and
                  centralterminationsequence of HIV-1"
promoter          2261..2509
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                  /note="RNA polymerase III promoter for human U6
snRNA"
gap              2511..2530
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misc_RNA          2531..2606
                  /label=Original TracrRNA
                  /note="guide RNA scaffold for the CRISPR/Cas9
system"
misc_feature      2648..2880
                  /label=EFS promoter
misc_feature      2868..8683
                  /label=dCas9_VPR
CDS               2888..6991
                  /codon_start=1
                  /product="catalytically dead mutant of the
                  Cas9endonucleasefrom the Streptococcus pyogenes Type
II
                  CRISPR/Cas system"
                  /label=Cas9m4
                  /note="RNA-guided DNA-binding protein
thatlacksendonuclease
                  activity due to the mutations D10A, D839A, H840A,
and N863A
                  (Mali et al., 2013)"

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NLIGALLFDSGETAEATRLKRTARRRYTRRKNRICYLQEIFSNEMAKVDDSSFFHRLEES
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FRGHFLIEGDLNPDNSVDKLFIQLVQTYNQLFEEENPINASGVDAKAILSARLSKSRRL
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et
                al., 1998)"
                /label=VP64

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(simianvirus40) large T antigen"
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humanRelA, also known as p65 (O'Shea and Perkins,
2008)"
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CDS 8114..8683
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transcription activator Rta/BRLF1 (Hardwick et al.,
1992;
Chavez et al., 2015)"
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/label=P2A
/note="Eukaryotic ribosomes fail to insert a peptide
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between the Gly and Pro residues, yielding separate
polypeptides."
/translation="ATNFSLLKQAGDVEE"
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/gene="Aspergillus terreus BSD"
/product="blasticidin S deaminase"
/label=BSD
/note="confers resistance to blasticidin"

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VNVYHFTGGPCAELVVLGTAAAAAAGNLTCIVAIGNENRGILSPCGRCRQVLLDLHPGI
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/label=WPRE
/note="woodchuck hepatitis
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virusposttranscriptionalregulatory element"
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                /note="common sequencing primer, one of multiple
similar
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    promoter     10301..10630
                /label=SV40
                /note="SV40 enhancer and early promoter"
    rep_origin   complement (10719..11304)
                /direction=LEFT
                /label=ori
                /note="high-copy-number ColE1/pMB1/pBR322/pUC origin
of
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carbenicillin, and
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LIKHW"

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    301 cgtcaatgac ggtaaatggc cgcctggca ttatgccag tacatgacct
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