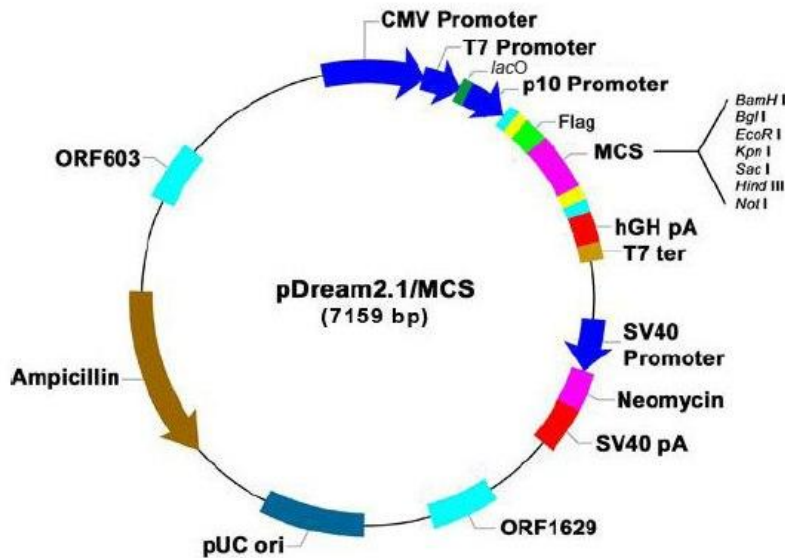


Datasheet Update: 03252009

## pDream2.1/MCS Vector

Cat. No. SD0222

**Description:** GenScript pDream2.1/MCS is an excellent expression vector. There are seven restriction enzyme sites in MCS. The gene cloned into MCS can be expressed in any one of the three major protein expression systems: Bacteria, Insect cells and Mammalian cells.



ORF603:	45-1011
CMV Promoter:	1026-1608
T7 Promoter:	1615-1631
P10 Promoter:	1657-1770
MCS:	1837-1875
SV40 Promoter:	3000-3345
Neomycin:	3386-4180
ORF1629:	4921-5427
pUC ori:	5605-6236
Ampicillin:	6237-7097

Flag Tag

1804 TAT ACC ATG GAT TAC AAG GAT GAC GAC GAT AAG GGA TCC  
ATA TGG TAC CTAATG TTC CTA CTG CTG CTA TTC CCT AGG

Met Asp Tyr Lys Asp Asp Asp Asp Lys Gly Ser

Bgl II    EcoR I    Kpn I    Sac I    Hind III    Not I

1843 GAG ATC TGG AAT TCG GTA CCG AGC TCA AGC TTG CGG CCG  
CTC TAG ACC TTAAGC CAT GGC TCG AGT TCG AAC GCC GGC

Glu Ile Trp Asn Ser Val Pro Ser Ser Ser Leu Arg Pro

SP6 Primer

1882 CCTATAGTGTACACCTAAATCGTAACCCAGC  
GGATATCACAGTGGATTAGCATTGGGTCG

**Cloning Region:**

**Sequencing Primers:**

**Forward primer** DA0009: T7 (TAATACGACTCACTATAGGG)

**Reverse primer** DA0008: SP6 (TACGATTTAGGTGACACTATAG)

**Features:**

1. **CMV promoter** is for high-level constitutive expression of genes in a variety of mammalian cell lines.
2. **T7 promoter** is for convenient expression of genes in bacteria and *in vitro* transcription/translation analysis.
3. **P10 baculovirus promoter** is for high-level expression of genes in baculovirus-infected insect cells.
4. **A Flag tag sequence** is placed before MCS for the single column purification and specific detection of the fused protein using specific and sensitive anti-Flag antibodies.
5. **The Flag tag sequence** is also the cleavage site by enterokinase (EK) to generate an authentic protein starting with Methionine.

\* **Limited Use Label License:** The use of CMV promoter is covered under U. S. Patent No. 5,168,062 and 5,385,839 owned and licensed by the University of Iowa Research Foundation and is sold for research use only. Commercial users must obtain a license to these patents directly from the University of Iowa Research Foundation (UIRF), 214 Technology Innovation Center, Iowa City, Iowa 52242. For further information, please contact the Associate Director of UIRF, at 319-335-4546.