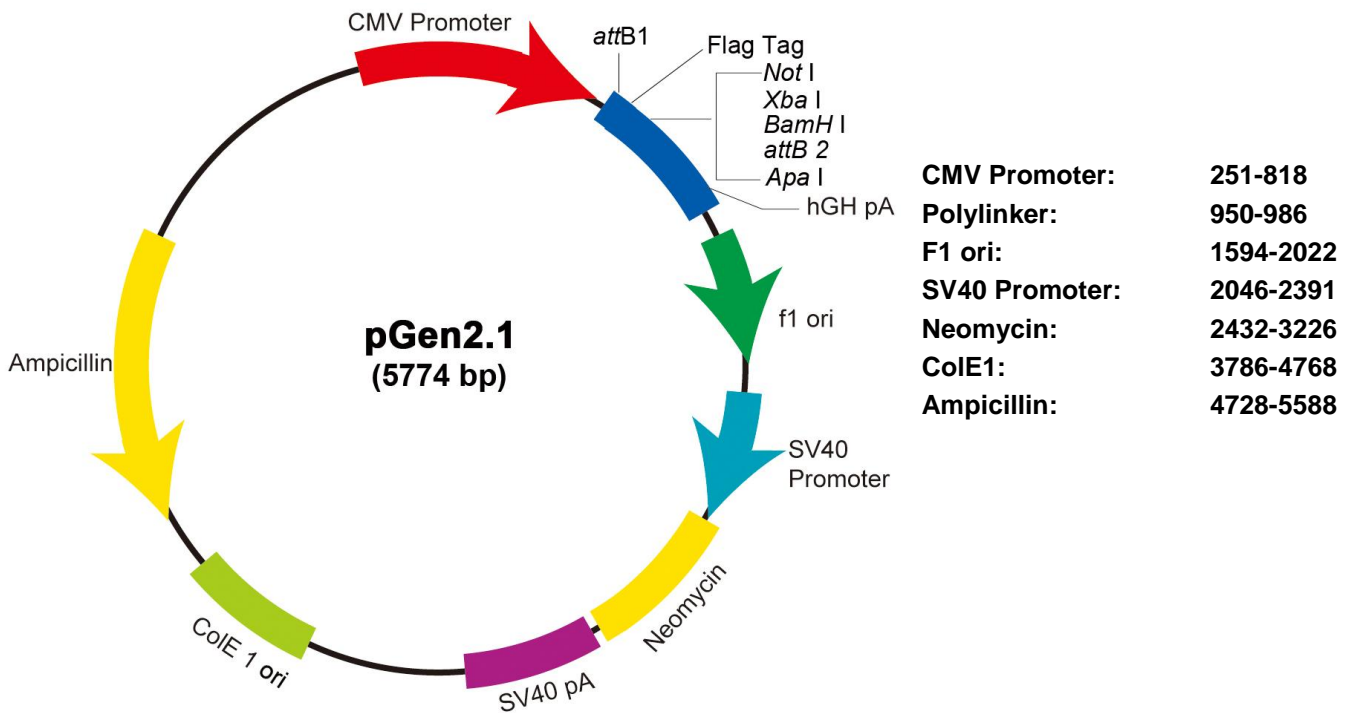


pGen2.1

Cat No. SD0122

Description: GenScript vector pGen2.1 is a Human cytomegalovirus (CMV) promoter-based mammalian gene expression vector. CMV promoter is one of the strongest promoters described. Based on RNA polymerase II system, CMV promoter drives higher-level constitutive expression of genes in a variety of mammalian cell lines. A target gene can be conveniently cloned into pGEN2.1 vector at multiple cloning sites (MCS). The target protein is expressed with the FLAG tag at the N-terminal. This tag will facilitate detection and purification of the target protein using commercially available tag-specific antibodies. This vector also contains a selectable marker for mammalian cells, neomycin phosphotransferase gene, under SV40 promoter. pGen2.1 vector can be used for either transient expression or stable expression in the presence of the antibiotic G418.



Cloning Region:



```

CTGGCTTATCGAAATTAATACGACTCACTATAGGGAGACCCAAGCTGGCTAGCGTTTAACTTAAG
                attB 1                               Flag Tag                               975 Not I
CTTACAAGTTTGTACAAAAAAGCAGGCTGCCACCATGGATTACAAGGATGACGACGATAAGGCGG
                Xba I BamH I                               Apa I 1037
CCGCTTGAGCATGCATCTAGAGGATCCACCCAGCTTTCTTGTACAAAGTGGTGGGCCCTATTCTA
  
```

Sequencing Primers:

Forward primer DA0009: T7 (TAATACGACTCACTATAGGG)

Reverse primer DA0029: SD0122 Reverse (CTAGTCAGACAAAATGATGC)

Features:

1. **CMV promoter** is for high-level constitutive expression of genes in a variety of mammalian cell lines (tm0180).
2. **A Flag tag sequence** is placed before the gene of interest for the single column purification and specific detection of the fused protein using specific and sensitive anti-Flag antibodies.
3. **The Flag tag sequence** is also the cleavage site by enterokinase (EK) to generate an authentic protein starting with Methionine.

*** Limited Use Label License:** * 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.