

【 Name 】	pAAV-CAG-shuttle-WPRE
【 Catalog Number 】	0917
【 Concentration 】	1.0 mg/mL
【 Volume 】	0.02 mL
【 Buffer 】	TE buffer, pH 8.0
【 Storage 】	<-20°C

【 Method of Production 】

Plasmid is amplified in commercial E. Coli competent cells such as DH5a. Plasmid is then purified using commercial DNA purification kit such as Qiagen MaxiPrep kit (endo-free).

Purified plasmid is dissolved in TE buffer, pH 8.0 and concentration determined by UV spectrophotometer at A260 and A280. Plasmid identity is confirmed by restriction enzyme digestion, and integrity of the ITRs is confirmed by Sma I digestion, which cut inside the ITRs.

Tested plasmid is aliquoted and stored at -20°C.

【 Note 】

For research use only.

CAUTION: Not intended for human or animal diagnostic or therapeutic uses.

WARNING: Follow NIH BSL I guidelines for all activities involving this material.

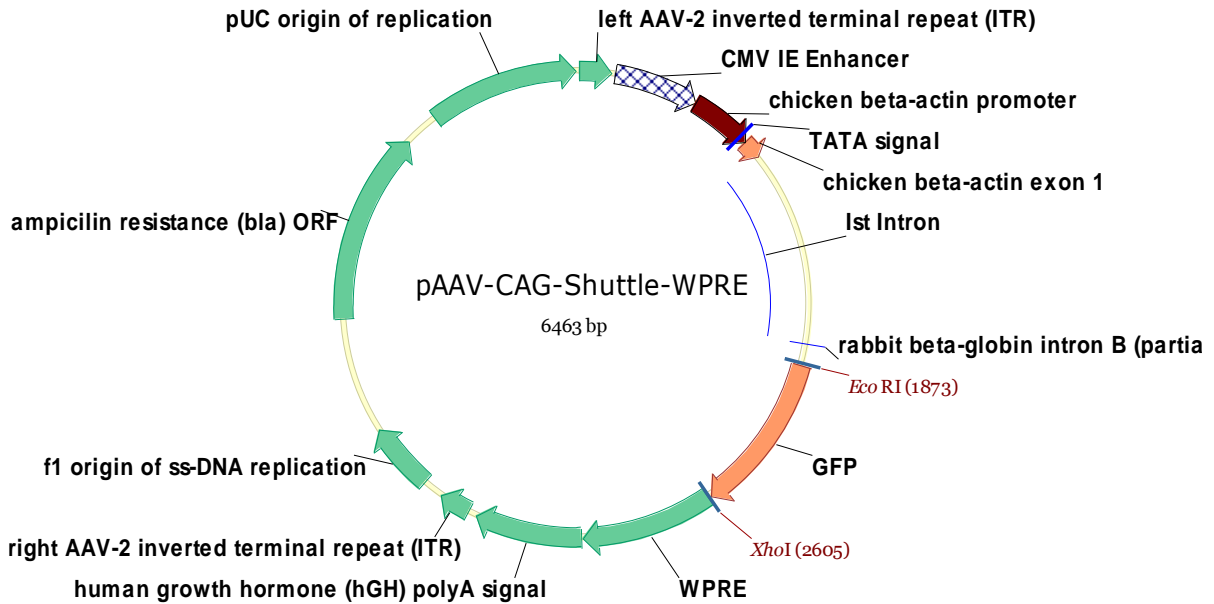
【 Reference 】

For detailed information on our test methodologies, please contact us at (510) 943-5099 or visit our website at <http://www.appliedviromics.com>

【 Instruction 】

1. The Woodchuck post-transcriptional regulatory element (WPRE) confers better processing and even longer stability of mRNA, thus enhancing gene expression. It has been reported that WPRE leads to 5-10 fold higher protein expression both in vitro and in vivo when inserted in adeno-, AAV-, and retro/lenti- viral vectors.
2. Transgene can be cloned between Eco RI site at 5' and XhoI site at 3'.
3. This shuttle plasmid allows transgene as large as 1800bp to be packed into AAV vector.

【Structure】



Functional Element	Sequence (note)
Left ITR:	1-141
CMV IE enhancer:	160-538
Chicken β -actin (CAG) promoter:	539-816
Chicken beta-actin exon 1:	817-904
Hybrid intron:	905-1823 (chicken beta-actin 1 st intron: 905-1774; rabbit beta-globin intron B (partial): 1783-1823)
GFP expression cassette:	1881-2597
Woodchuck post-transcriptional regulatory element (WPRE):	2610-3201
Human growth hormone poly-A:	3208-3686
Right ITR:	3726-3866
f1 origin:	3958-4264
ampicillin resistance (bla) ORF:	4783-5637
pUC origin of replication:	5791-6458