

Catalog Number: VG40296-NF

### **General Information**

Gene :	P. falciparum (strain 3D7) apical membrane antigen 1 (extracellular domain, ECD)
Official Symbol :	AMA1
Synonym :	AMA1
Source :	P. falciparum
cDNA Size:	1635bp
RefSeq :	XM_001347979.1
Description	

Lot : Please refer to the label on the tube

Vector : pCMV3-SP-N-FLAG

### Shipping carrier :

Each tube contains approximately 10 µg of lyophilized plasmid.

### Storage :

The lyophilized plasmid can be stored at ambient temperature for three months.

### **Quality control :**

The plasmid is confirmed by full-length sequencing with primers in the sequencing primer list.

### Sequencing primer list :

pCMV3-F:	5' CAGGTGTCCACTCCCAGGTCCAAG 3'	
pcDNA3-R :	5' GGCAACTAGAAGGCACAGTCGAGG 3'	
Or		
Forward T7 :	5' TAATACGACTCACTATAGGG 3'	
ReverseBGH :	5' TAGAAGGCACAGTCGAGG 3'	
nCMV/2 E and noDNA2 D are designed by Gine Disleminal las		

pCMV3-F and pcDNA3-R are designed by Sino Biological Inc. Customers can order the primer pair from any oligonucleotide supplier.

### **Plasmid Resuspension protocol**

- 1. Centrifuge at  $5,000 \times g$  for 5 min.
- 2. Carefully open the tube and add 100  $\mu$ l of sterile water to dissolve the DNA.
- Close the tube and incubate for 10 minutes at room temperature.
- 4. Briefly vortex the tube and then do a quick spin to concentrate the liquid at the bottom. Speed is less than  $5000 \times g$ .
- 5. Store the plasmid at -20  $^{\circ}$ C.

### The plasmid is ready for:

- Restriction enzyme digestion
- PCR amplification
- E. coli transformation
- DNA sequencing

# *E.coli* strains for transformation (recommended but not limited)

Most commercially available competent cells are appropriate for the plasmid, e.g. TOP10, DH5  $\alpha$  and TOP10F  $\dot{}$  .

### Plasmodium falciparum (strain 3D7) AMA1 (extracellular domain, ECD) ORF mammalian expression plasmid, N-Flag tag



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### **Vector Information**

All of the pCMV vectors are designed for high-level stable and transient expression in mammalian hosts. High-level stable and non-replicative transient expression can be carried out in most mammalian cells. The vectors contain the following elements:

•Human enhanced cytomegalovirus immediate-early (CMV) promoter for high-level expression in a wide range of mammalian cells.

• Hygromycin resistance gene for selection of mammalian cell lines.

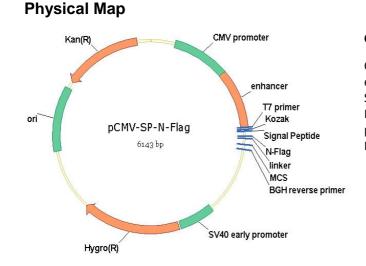
• A Kozak consensus sequence to enhance mammalian expression.

VectorName	pCMV3-SP-N-FLAG
Vector Size	6143bp
Vector Type	Mammalian Expression Vector
Expression Method	Constiutive, Stable / Transient
Promoter	CMV
Antibiotic Resistance	Kanamycin
Selection In Mammalian Cells	Hygromycin
Protein Tag	FLAG

## pCMV3-SP-N-FLAG (suitable for secretary

and membane protein expession)





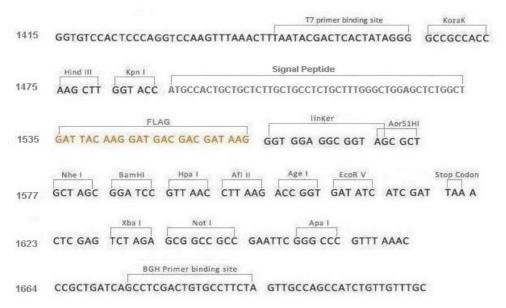
### Comments for pCMV3-SP-N-FLAG:

CMV promoter: bases 250-837 enhancer: bases 838-1445 SV40 early promoter: bases 2384-2753 Hygromycin ORF: bases 2771-3793 pUC origin: bases 4439-5112 Kanamycin ORF: bases 5186-6001

### Description

Vector Name	pCMV3-SP-N-FLAG
Vector Size	6143bp
Vector Type	Mammalian Expression Vector
Expression Method	Constitutive, Stable / Transient
Promoter	CMV
Antibiotic Resistance	Kanamycin
Selection In Mammalian Cells	Hygromycin
Protein Tag	FLAG
Sequencing Primer	Forward:T7(TAATACGACTCACTATAGGG) Reverse:BGH(TAGAAGGCACAGTCGAGG)

### Schematic of pCMV3-SP-N-FLAG Multiple Cloning Sites



pCMV3-SP-N-Flag is recommended for constructing the N-FLAG tag secretary and membrane proteins expression vector which containing a naïve signal peptide. An universal signal peptide is used to instead the naïve signal peptide.