MERS-CoV (NCoV / Novel coronavirus) Spike Protein (Codon Optimized) ORF mammalian expression plasmid, N-Flag tag

Sino Biological Inc.
Biological Solution Specialist

Catalog Number: **VG40069-NF**

General Information

Gene : MERS-CoV (NCoV / Novel coronavirus) Spike protein

Official Symbol : Spike

Synonym : S

Source : MERS-CoV

cDNA Size: 4062bp

Plasmid pCMV3-Flag-Spike(betacoronavirus 2c EMC 2012)

Description

Lot : Please refer to the label on the tube

Sequence Description :

A number of silent mutations were introduced into the DNA sequence in order to increase its protein expression level in mammalian cell system. The translated amino acid sequence is identical with AFS88936.1.

Restriction site: KpnI + XbaI (6kb + 4.1kb)

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'

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×g for 5 min.

2.Carefully open the tube and add 100 μl of sterile water to dissolve the DNA.

3.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×g.

5.Store the plasmid at -20 ℃.

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, DH5α and TOP10F´.

MERS-CoV (NCoV / Novel coronavirus) Spike Protein (Codon Optimized) ORF mammalian expression plasmid, N-Flag tag

Sino Biological Inc.
Biological Solution Specialist

Catalog Number: **VG40069-NF**

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:

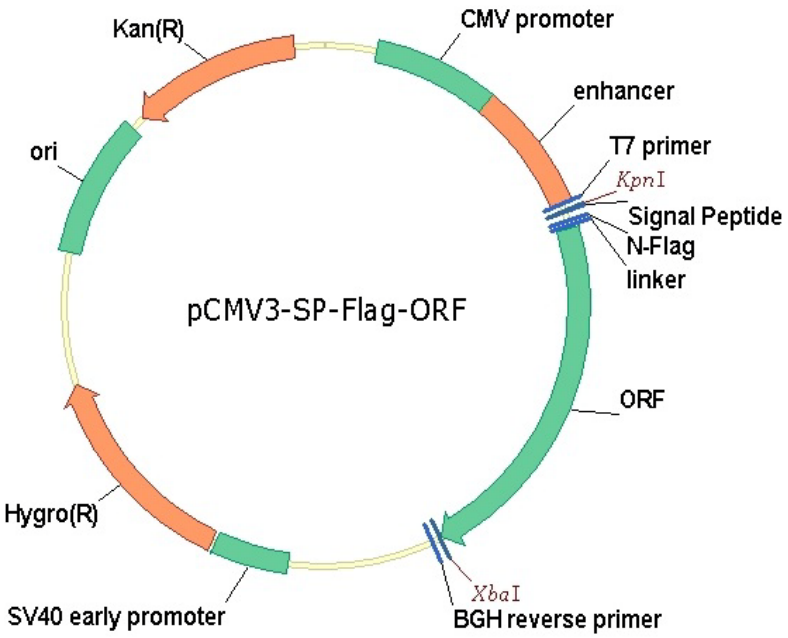
•Human enhanced cytomegalovirus immediate-early (CMV) promoter for high-level expression in a wide range of mammalian cells.

• Hygromycin resistance gene for selection of mammalian cell lines.

• A Kozak consensus sequence to enhance mammalian expression.

Vector Name	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

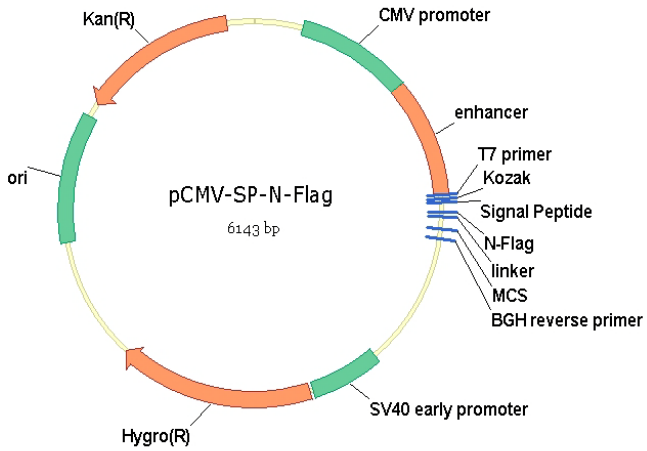
Physical Map of Plasmid :



pCMV3-SP-N-FLAG (suitable for secretary and membane protein expession)

Sino Biological Inc.
Biological Solution Specialist

Physical Map



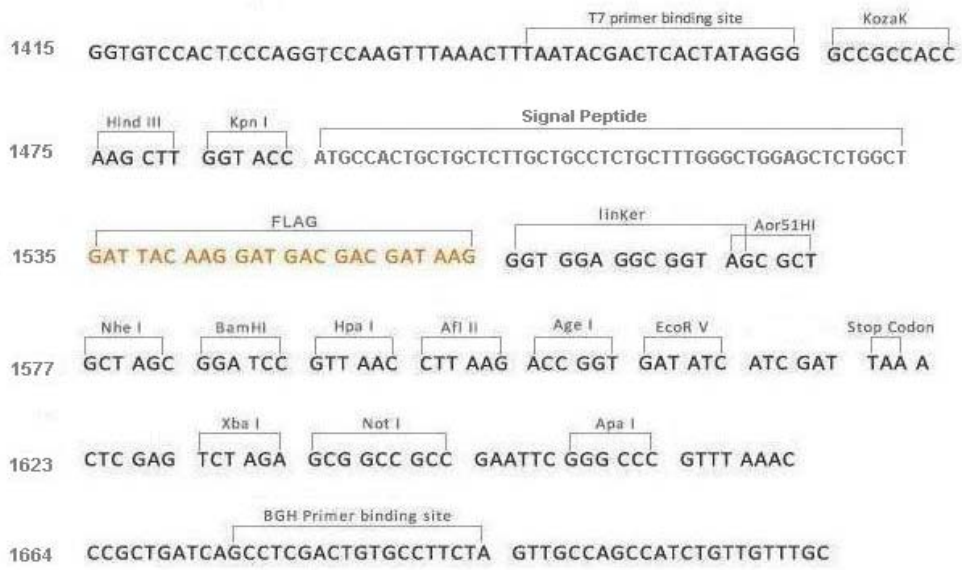
Comments for pCMV3-SP-N-FLAG:

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.