Influenza A H5N1 (A/Vietnam/1194/2004) Hemagglutinin / HA ORF mammalian expression plasmid (Codon Optimized), N-Myc tag



Catalog Number: VG11062-NM

General Information

Gene: (A/Vietnam/1194/2004)

Hemagglutinin / HA

Official Symbol:

Synonym: Hemagglutinin, HA

Source: H5N1

cDNA Size: 1707bp

Plasmid: pCMV3-Myc-H5N1-Vietnam-94-HA

Description

Please refer to the label on the tube Lot:

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 AAT73273.1.

Restriction site: KpnI + XbaI (6kb + 1.75kb)

Vector: pCMV3-SP-N-Myc

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

- Centrifuge at $5,000 \times g$ for 5 min.
- 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.
- 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 °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 α and TOP10F'.

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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 enhance mammalian expression.

Vector Name pCMV3-SP-N-Myc

Vector Size 6149bp

Vector Type Mammalian Expression Vector Expression Method Constiutive, Stable / Transient

Promoter CMV

Antibiotic Resistance Kanamycin

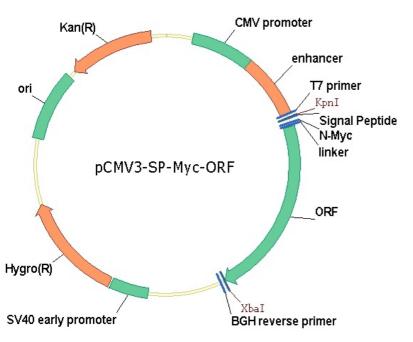
Selection In Mammalian Cells

Hygromycin

Protein Tag

Myc

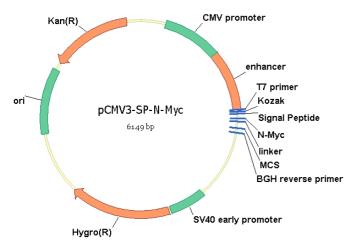
Physical Map of Plasmid:



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



Physical Map



Comments for pCMV3-SP-N-Myc:

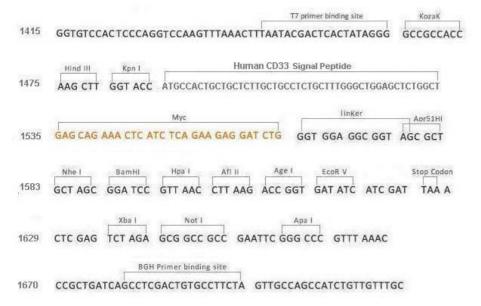
CMV promoter: bases 250-837 enhancer: bases 838-1445

SV40 early promoter: bases 2390-2759 Hygromycin ORF: bases 2777-3802 pUC origin: bases 4445-5118 Kanamycin ORF: bases 5192-6007

Description

Vector Name	pCMV3-SP-N-Myc
Vector Size	6149bp
Vector Type	Mammalian Expression Vector
Expression Method	Constitutive, Stable / Transient
Promoter	CMV
Antibiotic Resistance	Kanamycin
Selection In Mammalian Cells	Hygromycin
Protein Tag	Мус
Sequencing Primer	Forward:T7(TAATACGACTCACTATAGGG) Reverse:BGH(TAGAAGGCACAGTCGAGG)

Schematic of pCMV3-SP-N-Myc Multiple Cloning Sites



pCMV3-SP-N-Myc is recommended for constructing the N-Myc 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.