Human PRNP ORF mammalian expression plasmid, N-Flag tag



Catalog Number: HG12070-NF

General Information

Gene: prion protein

Official Symbol: PRNP

Synonym: CD230, PRP

Source: Human

cDNA Size: 762bp

RefSeq: NM_000311

Plasmid: pCMV3-Flag-PRNP

Description

Lot: Please refer to the label on the tube

Sequence Description:

Identical with the Gene Bank Ref. ID sequence.

Restriction site: Kpnl + Xbal (6kb + 0.78kb)

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

Oi

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 $5,000 \times g$ 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 $5000 \times g$.

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 $\dot{}$.

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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.

Vector Name pCMV3-SP-N-FLAG

Vector Size 6143bp

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

Hygromycin

Promoter CMV

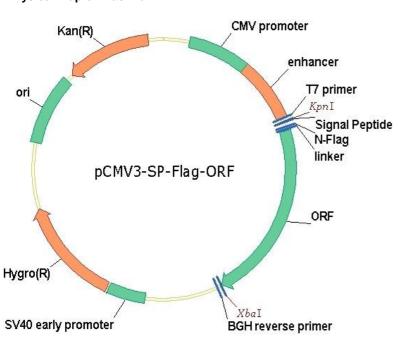
Antibiotic Resistance Kanamycin

Selection In

Mammalian Cells

Protein Tag FLAG

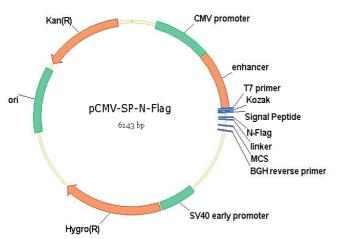
Physical Map of Plasmid:



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



Physical Map



Comments for pCMV3-SP-N-FLAG:

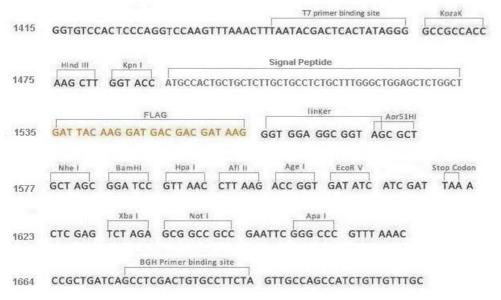
CMV promoter: bases 250-837 enhancer: bases 838-1445

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.