Rat SEMA4D ORF mammalian expression plasmid, N-HA tag



Catalog Number: RG80320-NY

General Information

Gene: sema domain, immunoglobulin domain

(Ig), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin)

Official Symbol: SEMA4D

Synonym: Sema4d

Source: Rat

cDNA Size: 2589bp

RefSeq: NM_001170563.1

Description

Lot: Please refer to the label on the tube

Vector: pCMV3-SP-N-HA

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' 5' GGCAACTAGAAGGCACAGTCGAGG 3' pcDNA3-R:

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, DH5α 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 to enhance mammalian expression.

Vector Name pCMV3-SP-N-HA

Vector Size 6146bp

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

Promoter CMV

Antibiotic Resistance Kanamycin

Selection In Mammalian Cells

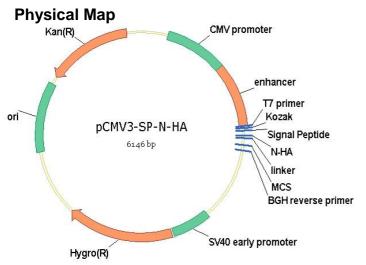
Protein Tag

HA

Hygromycin

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





Comments for pCMV3-SP-N-HA:

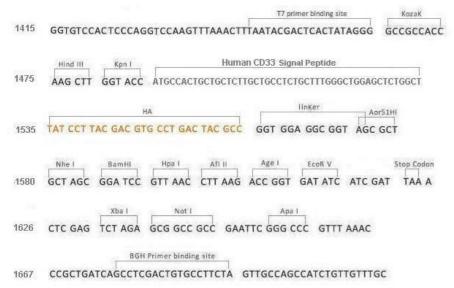
CMV promoter: bases 250-837 enhancer: bases 838-1445

SV40 early promoter: bases 2387-2756 Hygromycin ORF: bases 2774-3799 pUC origin: bases 4442-5115 Kanamycin ORF: bases 5189-6004

Description

Vector Name	pCMV3-SP-N-HA
Vector Size	6146bp
Vector Type	Mammalian Expression Vector
Expression Method	Constitutive, Stable / Transient
Promoter	CMV
Antibiotic Resistance	Kanamycin
Selection In Mammalian Cells	Hygromycin
Protein Tag	HA
Sequencing Primer	Forward:T7(TAATACGACTCACTATAGGG) Reverse:BGH(TAGAAGGCACAGTCGAGG)

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



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