# **Human CNGA4 ORF mammalian expression plasmid, N-HA tag**



Catalog Number: HG15744-NY

**General Information** 

Gene: cyclic nucleotide gated channel alpha 4

Official Symbol: CNGA4

Synonym: CNG4, CNG5, CNCA2, CNG-4, CNGB2,

OCNC2, OCNCb, OCNCBETA

Source: Human

cDNA Size: 1728bp

RefSeq: BC106936

**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'
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  $\mu$ 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 °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'.

# **Human CNGA4 ORF mammalian expression plasmid, N-HA 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. 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

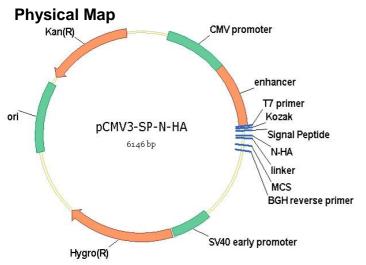
Protein Tag HA

LIA

Hygromycin

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





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

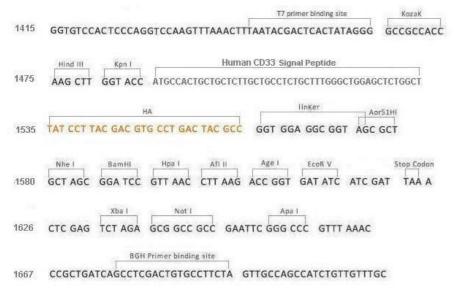
CMV promoter: bases 250-837 enhancer: bases 838-1445

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.