Rat NRAS ORF mammalian expression plasmid, N-His tag



Catalog Number: RG80678-NH

General Information

Gene: neuroblastoma ras oncogene

Official Symbol: **NRAS**

Synonym: Nras

Source: Rat

cDNA Size: 570bp

RefSeq: NM 080766.2

Description

Lot: Please refer to the label on the tube

Vector: pCMV3-SP-N-His

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'

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.
- 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-His

Vector Size 6149bp

Vector Type Mammalian Expression Vector

Expression Method Constitutive, Stable / Transient

Promoter CMV

Antibiotic Resistance Kanamycin

Selection In

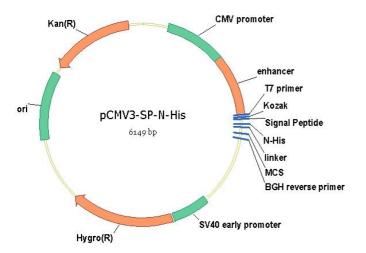
Hygromycin Mammalian Cells

His Protein Tag

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



Physical Map



Comments for pCMV3-SP-N-His:

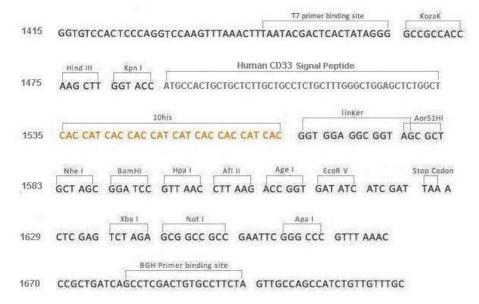
CMV promoter: bases 250-837 enhancer: bases 838-1445

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-His
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	His
Sequencing Primer	Forward:T7(TAATACGACTCACTATAGGG) Reverse:BGH(TAGAAGGCACAGTCGAGG)

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



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