Human LAG3 natural ORF mammalian expression plasmid, N-HA tag



Catalog Number: HG16498-NY

General Information

Gene: lymphocyte-activation gene 3n

Official Symbol: LAG3

Synonym: CD223

Source: Human

cDNA Size: 1578bp

RefSeq: NM_002286.5

Plasmid: pCMV3-HA-LAG3

Description

Lot: Please refer to the label on the tube

Sequence Description:

Identical with the Gene Bank Ref. ID sequence.

Restriction site: KpnI + XbaI (6kb + 1.58kb)

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 $5,000 \times g$ 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-HA

Vector Size 6146bp

Vector Type Mammalian Expression Vector

Expression Method Constitutive, Stable / Transient

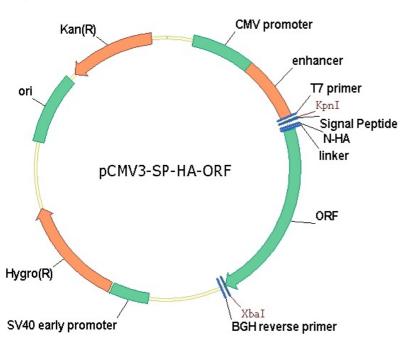
Promoter CMV

Antibiotic Resistance Kanamycin

Selection In Mammalian Cells Hygromycin

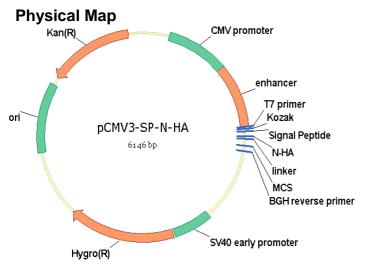
Protein Tag HA

Physical Map of Plasmid:



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





Comments for pCMV3-SP-N-HA:

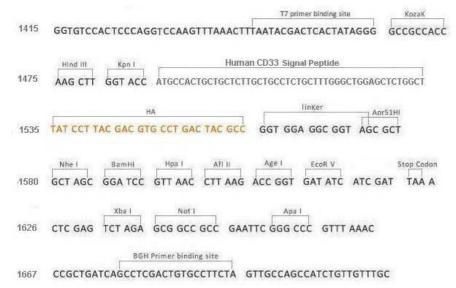
CMV promoter: bases 250-837 enhancer: bases 838-1445

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.