## **Human JAK2 ORF mammalian expression** plasmid, C-His tag



**Catalog Number:** HG11198-CH

**General Information** 

Gene: Janus kinase 2

Official Symbol: JAK2

Synonym: JTK10, JAK2

Source: Human

cDNA Size: 3399bp

RefSeq: NM\_004972.3

Plasmid: pCMV3-JAK2-His

**Description** 

Please refer to the label on the tube Lot:

**Sequence Description:** 

Identical with the Gene Bank Ref. ID sequence except for the point mutations: 489 C/T and 2490 G/A not causing the amino acid variation.

**Restriction site:** KpnI (Three restriction sites) + NotI (6kb +

2.16kb + 0.06kb + 1.22kb

Vector: pCMV3-C-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:

5' CAGGTGTCCACTCCCAGGTCCAAG 3' pCMV3-F: 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**

- 1. Centrifuge at  $5,000 \times g$  for 5 min.
- 2. Carefully open the tube and add 100 ul 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 $\alpha$  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-C-His

Vector Size 6164bp

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

Promoter CMV

Antibiotic Resistance Kanamycin Selection In Mammalian Cells Hygromycin

Protein Tag His

## **Physical Map of Plasmid:**

