# Rat ACTC1 ORF mammalian expression plasmid, C-GFPSpark tag



Catalog Number: RG80613-ACG

## **General Information**

Gene : actin, alpha, cardiac muscle 1

Official Symbol :	ACTC1
Synonym :	Actc1
Source :	Rat

cDNA Size: 1134bp

**RefSeq :** NM\_019183.1

# Description

Lot :	Please refer to the label on the tube
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Vector : pCMV3-C-GFPSpark

#### Shipping carrier :

Each tube contains approximately 10  $\mu$ g 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  $\mu$ 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  $\dot{}$  .

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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-C-GFPSpark
Vector Size	6848bp
Vector Type	Mammalian Expression Vector
Expression Method	Constitutive, Stable / Transient
Promoter	CMV
Antibiotic Resistance	Kanamycin
Selection In Mammalian Cells	Hygromycin
Protein Tag	GFPSpark