# Certificate of Analysis



## pAcGFP1-N In-Fusion® Ready Vector

Catalog No. Amount Lot Number

632501 1 μg Specified on product label.

## **Description**

pAcGFP1-N In-Fusion Ready Vector encodes a green fluorescent protein from *Aequorea coerulescens*. The vector is prelinearized to enable directional In-Fusion cloning of PCR fragments onto the 5' end of the AcGFP1-encoding gene without further restriction digests. Sequences complementary to the vector sequences (flanking the site of linearization) need to be incorporated at the 5' ends of the PCR primers (see protocol). The gene of interest is expressed as an N-terminal fusion to AcGFP1 in mammalian cells. The fluorescent protein coding sequence in this construct has been human codon-optimized for efficient expression and enhanced brightness in mammalian cells.

## **Package Contents**

• 1 μg pAcGFP1-N In-Fusion Ready Vector

## **Storage Conditions**

- Store at -20°C.
- Spin briefly to recover contents.
- Avoid repeated freeze/thaw cycles.

### **Expiration Date**

• Specified on product label.

#### Storage Buffer

• 10 mM Tris-HCl (pH 8.0), 1 mM EDTA (pH 8.0)

### Concentration

100 ng/μl

#### **Shipping Conditions**

• Dry ice

#### **Product Documents**

Documents for our products are available for download at <u>takarabio.com/manuals</u> The following documents apply to this product:

- In-Fusion Ready Vector Cloning Protocol-At-A-Glance
- pAcGFP1-N In-Fusion Ready Vector Information Packet

pAcGFP1-N In-Fusion Ready Vector

### Propagation in E. coli

• Suitable host strains: Stellar<sup>TM</sup> Competent Cells

• Selectable marker: plasmid confers resistance to kanamycin (50 μg/ml) in *E. coli* hosts.

• E. coli replication origin: pUC

• Copy number: ~500

• Plasmid incompatibility group: pMB1/ColE1

#### **Excitation and Emission of AcGFP1**

Excitation: 475 nmEmission: 505 nm

## **Quality Control Data**

• The presence of the correct fluorescent protein variant was confirmed by sequencing.

•  $A_{260}/A_{280}$ : 1.8–2.0

## **Functional Testing of Linear Markers**

When 5 ng of linearized vector was transformed into Stellar Competent Cells, fewer than 400 colonies were observed.

It is certified that this product meets the above specifications, as reviewed and approved by the Quality Department.

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# pAcGFP1-N In-Fusion® Ready Vector

#### CATALOG NO.

632501

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#### **STATEMENT 39**

AcGFP is covered by U.S. Patent Numbers; 7,432,053, 7,667,016, 7,879,988 and 7,897,726.

#### **STATEMENT 72**

Living Colors Fluorescent Protein Products:

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