Certificate of Analysis

In the interest of conserving resources, we are no longer shipping manuals with products. Please visit **www.clontech.com/manuals** to obtain an electronic version.

PRODUCT: AcGFP1 Vector Set

CATALOG NO.
632426

LOT NUMBER
Specified on product label.

STORAGE BUFFER
10 mM Tris-HCl (pH 8.0)
1 mM EDTA (pH 8.0)

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

SHELF LIFE
1 year from date of receipt under proper storage conditions.

SHIPPING CONDITIONS
- Part 1: Blue ice (4°C) or dry ice (–70°C)
- Part 2: Room temperature

DESCRIPTION
A set of three vectors encoding green fluorescent protein from *Aequorea coerulescens*. pAcGFP1 is a prokaryotic expression vector that also serves as a convenient source of fluorescent protein cDNA. In this vector, the full-length human-condon-optimized cDNA is flanked by distinct MCSs to facilitate excision from the vector and insertion into other eukaryotic or prokaryotic expression constructs. The other vectors, pAcGFP1-C1 and pAcGFP1-N1, are designed for studies in mammalian systems. These vectors allow expression of a protein of interest as a C- or N-terminal fusion, respectively. The fusion vectors can also be used as cotransfection markers since the unmodified vectors will express fluorescent protein. All of the fluorescent protein coding sequences in these constructs have been human codon-optimized for efficient expression in mammalian cells.

CONCENTRATION: 500 ng/µl each

PACKAGE CONTENTS
- 20 µg pAcGFP1 Vector
- 20 µg pAcGFP1-C1 Vector
- 20 µg pAcGFP1-N1 Vector

OTHER
- pAcGFP1 Vector Information (PT3715-5)
- pAcGFP1-C1 Vector Information (PT3717-5)
- pAcGFP1-N1 Vector Information (PT3716-5)

FOR RESEARCH USE ONLY

QUALITY CONTROL DATA

Please see back of page.

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APPROVED BY: _____

(PA7Y2544)

CLONING SITES

- **pAcGFP1 Vector**
  Age I, *Acc* I, *Apa* I, *Asp*718 I, *Bam*H I, *Bsi*W I, *Eco*R I, *Hin*c II, *Hin*d III, *Kpn* I, *Not* I, *Pst* I, *Sal* I, *Sma* I, *Spe* I, *Sph* I, *Stu I*, *Xma* I
- **pAcGFP1-C1 Vector**
  Acc I, *Apa* I, *Asp*718 I, *Bam*H I, *Bcl* I, *Bgl* II, *BspE* I, *Eco*R I, *Hin*d III, *Kpn* I, *Pst* I, *Sac* I, *Sac* II, *Sal* I, *Sma* I, *Xba* I, *Xho* I, *Xma* I
- **pAcGFP1-N1 Vector**
  Age I, *Acc* I, *Apa* I, *Asp*718 I, *Bam*H I, *Bgl* II, *Eco*47 III, *Eco*R I, *Hin*d III, *Kpn* I, *Nhe* I, *Pst* I, *Sac* I, *Sac* II, *Sal* I, *Sma* I, *Xho* I, *Xma* I

VECTOR CHARACTERISTICS AND QUALITY CONTROL DATA

- The identity of each plasmid was verified by digestion with the indicated restrictions enzymes (Table I). Fragments were observed on a 0.8% agarose/EtBr gel.
- The presence of the correct fluorescent protein variant was confirmed by sequencing.
- The purity of each plasmid was determined by the A_{260}/A_{280}. In all cases A_{260}/A_{280} was in a range of 1.8 - 2.0.

TABLE I. *AEQUOREA COERULESCENS* FLUORESCENT PROTEIN EXPRESSION VECTORS

		Selectable Marker		Quality Control Data	
Vector	**Plasmid Size**	***E. coli***	**Mammalian**	**Enzyme(s)**	**Fragment(s)**
pAcGFP1	3.4 kb	Amp	n/a	*Pvu* II	0.8 & 2.6 kb
				Age I	3.4 kb
pAcGFP1-C1	4.7 kb	Kan	Neo	*Pvu* II	0.6, 1.1, & 3.0 kb
				Age I	4.7 kb
pAcGFP1-N1	4.7 kb	Kan	Neo	*Pvu* II	0.6, 1.0, & 3.1 kb
				Age I	4.7 kb

Amp = confers resistance to ampicillin (50 µg/ml)
Kan = confers resistance to kanamycin (50 µg/ml)
Neo = confers resistance to neomycin; Stable transfectants can be selected with G418 (0.5 -1.3 mg/ml, depending on the cell line).
n/a = not applicable (prokaryotic expression vector)