Certificate of Analysis

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PRODUCT: pmOrange2 Vector

CATALOG NO. 632548

AMOUNT 20 µg

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
Blue ice (4°C) or
Dry ice (–70°C)

FOR RESEARCH USE ONLY

DESCRIPTION
pmOrange2 is a Living Colors® fluorescent protein vector which encodes mOrange2, a variant of mOrange which has been modified for improved stability (1). mOrange2 is derived from the tetrameric *Discosoma sp.* red fluorescent protein, DsRed. In this vector, the mOrange2 coding sequence is flanked by MCS regions, making it easy to excise the gene for use in other cloning applications. pmOrange2 is primarily intended to serve as a source of mOrange2 cDNA.

CONCENTRATION: 500 ng/µl

PLASMID SIZE: 3.3 kb

CLONING SITES
Acc65I, AgeI, ApoI, BamHI, EcoRI, KpnI, NotI, SmaI, XmaI

ANTIBIOTIC RESISTANCE
Ampicillin (100 µg/ml) for propagation in *E. coli*

PACKAGE CONTENTS
- 20 µg pmOrange2 Vector

OTHER
- Vector Information Packet (PT5052-5)

QUALITY CONTROL DATA

- Digestion with the indicated restriction enzymes produced fragments of the indicated sizes on a 0.8% agarose/EtBr gel:

Enzyme(s)	Fragment(s)
NotI	3.3 kb
BamHI & ApoI	0.7 & 2.6 kb

- A_{260}/A_{280}: 1.8 – 2.0

NOTE

Clontech is pleased to be able to offer researchers the Fruit Fluorescent Proteins that were developed in the laboratory of Dr. Roger Tsien at the University of California, San Diego. The Tsien group has published extensively on the characteristics and uses of these exciting products, and Clontech can provide you with a bibliography if you have any questions regarding their performance, structure, or applications. Clontech has not repeated the experiments conducted by the Tsien group. The genes, encoding the different proteins, are available in a bacterial source vector format.

REFERENCE

1. Shaner, N. C. *et al.* (2008) *Nature Methods* **5**(6):545–551.

Clontech

United States/Canada
800.662.2566
Asia Pacific
+1.650.919.7300
Europe
+33.(0)1.3904.6880
Japan
+81.(0)77.543.6116

Clontech Laboratories, Inc.
A Takara Bio Company
1290 Terra Bella Ave.
Mountain View, CA 94043
Technical Support (US)
E-mail: tech@clontech.com
www.clontech.com

(PA053870)

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The DsRedMonomer and the Fruit Fluorescent Proteins are covered by one or more of the following U.S. Patents: 7,005,511; 7,157,566; 7,393,923 and 7,250,298.

Living Colors Fluorescent Protein Products:

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This document has been reviewed and approved by the Clontech Quality Assurance Department.