

## pHcRed1 Vector

**Catalog No.**

632410

**Amount**

20 µg

**Lot Number**

Specified on product label.

### Description

pHcRed1 is a bacterial expression vector which encodes the far-red fluorescent protein, HcRed1. HcRed1 was generated by mutagenesis of a non-fluorescent chromoprotein from the reef coral *Heteractis crispa*. The HcRed1 coding sequence has been human codon-optimized for higher expression in mammalian cells. The sequence upstream of HcRed1 has been converted to a Kozak consensus sequence to further increase the translation efficiency in eukaryotic cells.

### Package Contents

- 20 µg pHcRed1 Vector

### Storage Conditions

- Store 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.

### Storage Buffer

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

### Concentration

- 500 ng/µl

### Shipping Conditions

- Dry ice (-70°C)

### Propagation in *E. coli*

- Recommended host strain: JM109
- Selectable marker: plasmid confers resistance to ampicillin (50 µg/ml) to *E. coli* hosts.
- *E. coli* replication origin: pUC
- Copy number: High

### Excitation and Emission Maxima of HcRed1

- Excitation: 588 nm
- Emission: 618 ± 4 nm

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## Quality Control Data

### Plasmid Identity & Purity

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

Enzyme(s)	Fragment(s) (kb)
KpnI	3.3
KpnI & NotI	2.6 & 0.7

- Vector identity was confirmed by sequencing.
- $A_{260}/A_{280}$ : 1.8–2.0

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

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