**PRODUCT:** pHcRed1-Mito Vector

<table>
<thead>
<tr>
<th>CATALOG NO.</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>632434</td>
<td>20 µg</td>
</tr>
</tbody>
</table>

**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)

**DESCRIPTION**
pHcRed1-Mito encodes a far-red fluorescent protein HcRed1 fused with mitochondrial targeting sequence from the precursor protein of human cytochrome c oxidase subunit VIII. HcRed1 is a fluorescent variant of a chromoprotein found in the reef coral *Heteractis crispa*. The coding sequence for HcRed1 has been human codon optimized for higher expression in mammalian cells. pHcRed1-Mito can be used for specific labeling of mitochondria in living cells.

**CONCENTRATION:** 500 ng/µl

**PLASMID SIZE:** 4.7 kb

**ANTI-BIOTIC RESISTANCE**
Kanamycin (50 µg/ml) for propagation in *E. coli*

**PACKAGE CONTENTS**
1 tube of pHcRed1-Mito Vector

**OTHER**
- Vector Information Packet (PT3734-5)

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

<table>
<thead>
<tr>
<th>Enzyme(s)</th>
<th>Fragment(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age I</td>
<td>4.7 kb</td>
</tr>
<tr>
<td>Nco I</td>
<td>1.9, 1.7, 0.7 &amp; 0.35 kb</td>
</tr>
</tbody>
</table>

- $A_{260}/A_{280}$: 1.8 – 2.0
- The identity of this vector was confirmed by sequencing.

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**APPROVED BY:**

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