pRetroX-IRES-DsRedExpress Vector

**Description**

The pRetroX-IRES-DsRedExpress vector is a bicistronic retroviral expression vector containing DsRed-Express as a marker for transfection/infection efficiency. A gene of interest is inserted into the MCS located upstream of the encephalomyocarditis virus (ECMV) internal ribosomal entry site (IRES). The IRES sequence allows the protein of interest and DsRed-Express to be independently translated from the same mRNA transcript. DsRed-Express is a human codon-optimized variant of the *Discosoma* sp. red fluorescent protein (DsRed) that has been engineered for faster maturation.

**Package Contents**

- 20 µg pRetroX-IRES-DsRedExpress Vector (500 ng/µl)

**Storage Conditions**

- Store plasmids 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)

**Product Documents**

Documents for our products are available for download at [takarabio.com/manuals](http://takarabio.com/manuals)

The following documents apply to this product:

- Retroviral Gene Transfer and Expression User Manual (PT3132-1)
- Vector Information Packet (PT3965-5)

**Propagation in E. coli**

- Selectable marker: Plasmids confer resistance to ampicillin (100 µg/ml) in *E. coli*.
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:

<table>
<thead>
<tr>
<th>Vector</th>
<th>Enzyme(s)</th>
<th>Fragment(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>pRetroX-IRES-DsRedExpress</td>
<td>NotI</td>
<td>5.9 kb</td>
</tr>
<tr>
<td></td>
<td>KpnI</td>
<td>0.5, 0.9, 1.3, 3.2 kb</td>
</tr>
</tbody>
</table>

- Vector identity was confirmed by sequencing.
- A260/A280: 1.8–2.0

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

pRetroX-IRES-DsredExpress Vector

CATALOG NO.
632521

NOTICE TO PURCHASER:

Our products are to be used for Research Use Only. They may not be used for any other purpose, including, but not limited to, use in humans, therapeutic or diagnostic use, or commercial use of any kind. Our products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products or to provide a service to third parties without our prior written approval.

Your use of this product is also subject to compliance with the licensing requirements, listed below if applicable, and described on the product’s web page at http://www.takarabio.com. It is your responsibility to review, understand and adhere to any restrictions imposed by these statements.

STATEMENT 72

Living Colors Fluorescent Protein Products:

Not-For-Profit Entities: Orders may be placed in the normal manner by contacting your local representative or Takara Bio USA, Inc. Customer Service. Any and all uses of this product will be subject to the terms and conditions of the Non-Commercial Use License Agreement (the “Non-Commercial License”), a copy of which can be found below. As a condition of sale of this product to you, and prior to using this product, you must agree to the terms and conditions of the Non-Commercial License. Under the Non-Commercial License, Takara Bio USA, Inc. grants Not-For-Profit Entities a non-exclusive, non-transferable, non-sublicensable and limited license to use this product for internal, non-commercial scientific research use only. Such license specifically excludes the right to sell or otherwise transfer this product, its components or derivatives thereof to third parties. No modifications to the product may be made without express written permission from Takara Bio USA, Inc. Any other use of this product requires a different license from Takara Bio USA, Inc. For license information, please contact a licensing representative by phone at 650.919.7320 or by e-mail at licensing@takarabio.com.

For-Profit Entities wishing to use this product are required to obtain a license from Takara Bio USA, Inc. For license information, please contact a licensing representative by phone at 650.919.7320 or by e-mail at licensing@takarabio.com.

Not-For-Profit Non-Commercial Use License:

STATEMENT 24

DsRed2, DsRedExpress, DsRedExpress2, E2-Crimson, HcRed and pTimer are covered by one or more of the following U.S. Patent Nos. 7,166,444; 7,150,979; 7,157,565; 7,183,399; 7,858,844; 8,093,450; 8,461,769 and non-
Notice to Purchaser

U.S. international equivalents in some countries.

TRADEMARKS:

©2007 Takara Bio Inc. All Rights Reserved.
All trademarks are the property of Takara Bio Inc. or its affiliate(s) in the U.S. and/or other countries or their respective owners. Certain trademarks may not be registered in all jurisdictions.