

iDimerize™ Inducible Heterodimer Vector Set 1

| Catalog No. | Amount | Lot Number |
|--|--------|-----------------------------|
| 635063 (Not sold separately) Sold as a part of 635067 | Each | Specified on product label. |

Description

The iDimerize Inducible Heterodimer Vector Set 1 is provided in the iDimerize Inducible Heterodimer System (Cat. No. 635067), which lets you control the heterodimerization of two different proteins of interest in live cells via a membrane-permeant compound. The iDimerize Inducible Heterodimer Vector Set 1 contains three vectors that provide an assortment of fusion tags (i.e., dimerization domains, an HA epitope tag, and localization sequences) that can be easily added to your proteins of interest. The activity and localization of the resulting chimeric proteins can be controlled by the addition of a small molecule (A/C Heterodimerizer) to the cell medium. The vector set also includes two linear selection markers for hygromycin and puromycin resistance.

NOTE: pHet-1, pHet-Mem1, and pHet-Nuc1 are identical to vectors pC₄-R_HE, pC₄M-F2E, and pC₄EN-F1, respectively, previously supplied in the ARGENT Regulated Heterodimerization Kit from ARIAD Pharmaceuticals, Inc.

Package Contents

- 20 µl pHet-1 Vector (500 ng/µl)
- 20 µl pHet-Mem1 Vector (500 ng/µl)
- 20 µl pHet-Nuc1 Vector (500 ng/µl)
- 40 µl Linear Hygromycin Marker (50 ng/µl)
- 40 µl Linear Puromycin Marker (50 ng/µl)

Storage Conditions

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

Expiration Date

- Specified on product label.

Shipping Conditions

- Dry ice

Product Documents

Documents for our products are available for download at takarabio.com/manuals

The following documents apply to this product:

- iDimerize Inducible Heterodimer System User Manual
- pHet-1 Vector Information
- pHet-Mem1 Vector Information
- pHet-Nuc1 Vector Information

Takara Bio USA, Inc.

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Propagation in *E. coli*

- Recommended host strain: Stellar™ Competent Cells. Single-stranded DNA production requires a host containing an F plasmid such as JM109 or XL1-Blue.
- Selectable marker: plasmid confers resistance to ampicillin (100 µg/ml) in *E. coli* hosts.
- *E. coli* replication origin: pUC

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:

| Vector | Enzymes | Fragments |
|-----------|---------------|--------------|
| pHet-1 | SpeI | 5.3 kb |
| | EcoRI & BamHI | 0.4 & 5.0 kb |
| pHet-Nuc1 | SpeI | 5.4 kb |
| | EcoRI & BamHI | 0.4 & 5.0 kb |
| pHet-Mem1 | SpeI | 5.7 kb |
| | EcoRI & BamHI | 0.8 & 5.0 kb |

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

Linear Selection Marker Identity

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

| Marker | Enzymes | Fragments |
|--------------------------|----------------|---------------------|
| Linear Hygromycin Marker | HindIII & XbaI | 0.5, 0.6 & 1.1 kb |
| Linear Puromycin Marker | HindIII & XbaI | 0.45, 0.6 & 0.75 kb |

Functional Testing of Linear Markers

HEK 293 cells were transfected with 200 ng of either the Linear Hygromycin Marker or the Linear Puromycin Marker. After 5 hr at 37°C, the transfection solution was removed, and the cells were given fresh medium. 48 hr later, the cells were plated in two 10 cm plates. 48 hr after plating, medium containing either hygromycin or puromycin was added to the plates. After 2–3 weeks, >20 clones were identified.

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

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CATALOG NO.

635063

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.

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