# In-Fusion® HD Cloning Kit

**Description**

In-Fusion HD Cloning Kits are designed for fast, directional cloning of one or more fragments of DNA into any vector. The cornerstone of In-Fusion Cloning technology is our proprietary In-Fusion HD Enzyme Premix, which fuses DNA fragments, e.g., PCR-generated sequences and linearized vectors, efficiently and precisely by recognizing a 15-bp overlap at their ends. This 15-bp overlap can be engineered by designing primers for amplification of the desired sequences.

In-Fusion HD Cloning Kits offer high efficiency, especially for long fragments, short oligonucleotides, and multiple fragments.

**Package Contents**

**Cat. No. 639648 (10 rxns):**
- 20 µl 5X In-Fusion HD Enzyme Premix
- 5 µl pUC19 Control Vector, linearized (50 ng/µl)
- 10 µl 2 kb Control Insert (40 ng/µl)

**Cat. No. 639649 (50 rxns):**
- 100 µl 5X In-Fusion HD Enzyme Premix
- 3 x 5 µl pUC19 Control Vector, linearized (50 ng/µl)
- 3 x 10 µl 2 kb Control Insert (40 ng/µl)

**Cat. No. 639650 (100 rxns):**
- 2 x 100 µl 5X In-Fusion HD Enzyme Premix
- 6 x 5 µl pUC19 Control Vector, linearized (50 ng/µl)
- 6 x 10 µl 2 kb Control Insert (40 ng/µl)

**Storage Conditions**
- Store at –20°C

**Shelf Life**
- 1 year from date of receipt under proper storage conditions.

**Shipping Conditions**
- Dry ice (–70°C)
Certificate of Analysis

In-Fusion HD Cloning Kit

Product Documents

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

The following documents apply to this product:

- In-Fusion HD Cloning Kit User Manual
- pUC19 Linearized Vector Information

Quality Control Data

A sample kit from this lot of In-Fusion HD Cloning Kits was used to clone 80 ng of 2 kb Control Insert into linearized pUC19 (50 ng) as described in the User Manual, using an incubation time of 15 min at 50°C. A 2.5-μl aliquot of the cloning reaction was used to transform 50 μl of Stellar™ Competent Cells (transformation efficiency >5 x 10⁸ cfu/μg). After 1 hr of growth in 450 μl of SOC medium, 50 μl of the transformation culture was plated onto an LB Amp 100/X-gal/IPTG plate. At least 500 white colonies were observed for the cloning reaction.

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

In-Fusion® HD Cloning Kit

CATALOG NO.
639648, 639649, 639650

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 28

This product is covered by the claims of U.S. Patent No. 7,575,860 and its foreign counterpart patent claims.

TRADEMARKS:

© 2018 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.