

# Guide-it™ Flap Reagents

Catalog Nos.	Amount	Lot Number
632662 (Not sold separately; sold as a part of 632659)	100 rxns	Specified on product label.
632663 (Not sold separately; sold as a part of 632660)	400 rxns	Specified on product label.

# **Description**

Guide-it Flap Reagents are supplied as part of the Guide-it Knockin Screening Kit (Cat. Nos. 632659 & 632660) and contain the enzymes, buffers, and detection reagents required for the kit protocol. The Guide-it Knockin Screening Kit enables sensitive detection of successful homologous recombination (HR) events in mixed or clonal cell populations regardless of the knockin length (from single-nucleotide substitutions to longer insertions) or the sequence of the genomic region surrounding the edit. The simple and rapid kit workflow consists of PCR amplification of the genomic target site followed by an enzymatic assay with green and red fluorescent readouts. The enzymatic assay employs a standard fluorescence plate reader or qPCR machine for endpoint detection of fluorescence, and no additional special instrumentation is required. The overall workflow takes approximately four hours to complete, and the stringency of the assay is such that detection of fluorescent signal(s) positively correlates with the presence of the desired sequence at the genomic target site.

## **Package Contents**

<u>623662</u>	<u>632663</u>	
(100 rxns)	(400 rxns)	
50 μl	200 μ1	Terra™ PCR Direct Polymerase Mix
2 x 750 μl	5 x 1 ml	2X Terra PCR Direct Buffer (with Mg <sup>2+</sup> , dNTP)
8 ml	32 ml	Dilution Buffer
20 ml	2 x 35 ml	RNase-free Water
200 μ1	800 µl	Annealing Buffer
300 µl	1.2 ml	Flapase Buffer
100 µl	400 μ1	Guide-it Flapase
50 μ1	200 μ1	Guide-it Green Flap Detector (40X)
50 µl	200 µl	Guide-it Red Flap Detector (40X)

#### **Storage Conditions**

• Store at -20°C.

#### **Expiration Date**

Specified on product label.

#### **Shipping Conditions**

Dry ice

#### **Product Documents**

Documents for our products are available for download at <u>takarabio.com/manuals</u> The following documents apply to this product:

• Guide-it Knockin Screening Kit User Manual

Takara Bio USA, Inc.

2560 Orchard Parkway, San Jose, CA 95131, USA U.S. Technical Support: technical support@takarabio.com

# **Quality Control Data**

# Terra PCR Direct Polymerase Mix and 2X Terra PCR Direct Buffer (with Mg<sup>2+</sup>, dNTP)

#### • Purity:

Supercoiled pBR322 DNA (0.6  $\mu$ g) and HindIII-digested  $\lambda$  DNA (0.6  $\mu$ g) was incubated with 10 units of Terra PCR Direct Polymerase for 1 hr at 74°C; no nicking, endonuclease, or exonuclease activity was detected.

#### Activity:

- 1. Terra PCR Direct Polymerase Mix was used to amplify 0.5 and 2 kb targets from human genomic DNA. The enzyme produced high yields of each target, with little or no background.
- 2. Terra PCR Direct Polymerase Mix was used to amplify a 4 kb target from mouse genomic DNA. The enzyme produced high yields of the target, with little or no background.

#### **Dilution Buffer**

Dilution Buffer has been tested for pH and conductivity following standard procedures.

# Guide-it Flapase, Flapase Buffer, Annealing Buffer, Guide-it Green Flap Detector (40X), Guide-it Red Flap Detector (40X), and RNase-free Water

The Guide-it Knockin Control Set was used to detect G and T nucleotides at position 1,285 in the MTHFR gene using the Guide-it Knockin Screening Kit following the protocol described in the user manual. The resulting fluorescent measurements had Z-factors >0.6. The ratio between the positive and negative signals was  $\ge 3$ , and the ratio between the positive and background signals was  $\ge 6$ .

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

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# **Guide-it<sup>TM</sup> Flap Reagents**

CATALOG NOS.

632662 & 632663

#### 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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#### **STATEMENT 272**

This product ("Product") and its use, is the subject of U.S. Patents 8,697,359 and 8,771,945 and pending U.S. Patent applications. The purchase of the Product conveys to the buyer the non-transferable right to use Product(s) purchased from Takara Bio USA, Inc. or its Affiliates, and any progeny, modification or derivative of a Product, or any cell or animal made or modified through use of a Product, or any progeny, modification or derivative of such cell or animal ("Related Material"), solely for research conducted by the buyer in accordance with all of the following requirements. No right is given to use this Product or Related Material for any other purpose, including, but not limited to, use in drugs, in vitro diagnostic purposes, therapeutics, or in humans. The buyer shall not sell or otherwise transfer Products (including without limitation any material that contains a Licensed Product in whole or part) or any Related Material to any other person or entity, or use Products or any Related Material to perform services for the benefit of any other person or entity, (ii) the buyer shall use only the purchased amount of the Products and components of the Products, and shall use any Related Material, only for its internal research and not for (a) the practice, performance or provision of any method, process or service, or (b) the manufacture, sale, use, distribution, disposition or importing of any product, in each case (a) or (b) for consideration, or on any other commercial basis ("Commercial Purpose"), (iii) the buyer shall use Licensed Products and any Related Material in compliance with all applicable laws and regulations, including without limitation applicable human health and animal welfare laws and regulations, and (iv) the buyer shall indemnify, defend and hold harmless MIT, Harvard and The Broad and their current and former trustees, directors, officers, faculty, affiliated investigators, students, employees, and agents and their respective successors, heirs and assigns ("Indemnitees"), against any liability, damage, loss, or expense (including without limitation reasonable attorneys' fees and expenses) incurred by or imposed upon any of the Indemnitees in connection with any claims, suits, investigations, actions, demands or judgments arising out of or related to the exercise of any rights granted to the buyer, or any breach of the rights granted hereunder by the buyer.

#### **STATEMENT 325**

Patent pending. For further information, please contact a Takara Bio USA licensing representative by email at

Takara Bio USA, Inc.

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8/9/2023

# **Notice to Purchaser**



8/9/2023

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