

# TrypLE™ Express

Catalog Numbers 12604013, 12604021, 12604039, 12604054, 12605010, 12605028, 12605036, 12605093

Pub. No. MAN0007321 Rev. 2.0

 **WARNING!** Read the Safety Data Sheets (SDSs) and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves. Safety Data Sheets (SDSs) are available from [thermofisher.com/support](https://www.thermofisher.com/support).

## Product description

TrypLE™ is an animal origin-free recombinant enzyme alternative to porcine or bovine trypsin for the dissociation of attachment-dependent cell lines from plasticware. TrypLE™ cleaves peptide bonds on the C-terminal side of lysine and arginine but with greater specificity than native trypsin preparations due to the superior purity of TrypLE™. TrypLE™ has demonstrated the ability to dissociate cells cultured both in serum-free and serum supplemented systems. TrypLE™ products are formulated in DPBS/1 mM EDTA, are room-temperature stable, and are convenient to use.

## Contents and storage

Product	Cat. No.	Amount	Storage	Shelf life <sup>[1]</sup>
TrypLE™ Express Enzyme (1X), no phenol red	12604013	100 mL	15°C to 30°C; Protect from light	24 months
	12604021	500 mL		
	12604039	20 × 100 mL		
	12604054	5 L		
TrypLE™ Express Enzyme (1X), phenol red	12605010	100 mL	15°C to 30°C; Protect from light	24 months
	12605028	500 mL		
	12605036	20 × 100 mL		
	12605093	5 L		

<sup>[1]</sup> Shelf life duration is determined from Date of Manufacture.

## Procedural guidelines

- No inactivation required; dilution alone inactivates TrypLE™ avoiding the need for trypsin inhibitors.
- TrypLE™ is also stable when stored in PET™ bottles at 2°C to 8°C and -20°C to -5°C protected from light up to 24 months.
- TrypLE™ packaged in the 5 L universal bag is also stable when stored at 2°C to 8°C protected from light up to 24 months.

## Detach cells

TrypLE™ is designed as a direct substitute for trypsin™ in existing protocols.

1. Pre-warm TrypLE™ and complete growth medium to 37°C before use. Minimize dwell time.

**Note:** TrypLE™ may be used at ambient room temperature for many types of cells.

2. Aspirate spent medium and discard.

3. Wash cell monolayer with 5 mL of Dulbecco's Phosphate Buffered Saline (DPBS) without calcium and magnesium. Aspirate and discard.
4. Add an appropriate volume (e.g., 5 mL in a 75 cm<sup>2</sup> flask) of TrypLE™ to flask. Ensure complete coverage of cell monolayer with TrypLE™.
5. Incubate at 37°C until cells have detached. Observe cell monolayer using an inverted microscope to ensure complete cell detachment from the surface of the flask. Gently tap flask to dislodge cells if necessary.
6. Add 5–10 mL of pre-warmed complete medium to flask. Tilt flask in all directions to thoroughly rinse flask. cell suspension to a 15-mL conical tube.
7. Centrifuge at 100 × g for 5–10 minutes.
8. Discard supernatant and resuspend cell pellet with 2–5 mL of pre-warmed complete medium.

9. Determine viable cell density and percent viability using a Countess™ Automated Cell Counter (similar automated or manual methods may be used).
10. Seed, incubate and subculture according to normal protocols depending on your cell type.

**Note:** Use of soybean trypsin inhibitor is not recommended.

## Limited product warranty

Life Technologies Corporation and/or its affiliate(s) warrant their products as set forth in the Life Technologies' General Terms and Conditions of Sale at [www.thermofisher.com/us/en/home/global/terms-and-conditions.html](http://www.thermofisher.com/us/en/home/global/terms-and-conditions.html). If you have any questions, please contact Life Technologies at [www.thermofisher.com/support](http://www.thermofisher.com/support).

## Related products

Product	Cat. No.
Dulbeccos Phosphate Buffered Saline, without calcium and magnesium	14190
Distilled Water	15230
Trypsin-EDTA, 1X	25300
UltraPure™ 0.5 M EDTA, pH8.0	15575
TrypLE™ Select CTS™	A12859



Life Technologies Corporation | 3175 Staley Road | Grand Island, NY 14072

For descriptions of symbols on product labels or product documents, go to [thermofisher.com/symbols-definition](http://thermofisher.com/symbols-definition).

The information in this guide is subject to change without notice.

**DISCLAIMER:** TO THE EXTENT ALLOWED BY LAW, THERMO FISHER SCIENTIFIC INC. AND/OR ITS AFFILIATE(S) WILL NOT BE LIABLE FOR SPECIAL, INCIDENTAL, INDIRECT, PUNITIVE, MULTIPLE, OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH OR ARISING FROM THIS DOCUMENT, INCLUDING YOUR USE OF IT.

**Important Licensing Information:** This product may be covered by one or more Limited Use Label Licenses. By use of this product, you accept the terms and conditions of all applicable Limited Use Label Licenses.

©2020 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific and its subsidiaries unless otherwise specified.