TrypLE™ Select

Catalog Numbers 12563011, 12563029, A1217701, A1217702, A1217703

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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**.

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[1]
TrypLE™ Select Enzyme (1X), no phenol red	12563011 12563029	100 mL 500 mL	15°C to 30°C; Protect from light	24 months
TrypLE™ Select Enzyme (10X), no phenol red	A1217701 A1217702 A1217703	100 mL 500 mL 20 × 100 mL	15°C to 30°C; Protect from light	24 months

[1] Shelf life duration is determined from Date of Manufacture.

Procedural guidelines

- TrypLE™ Select is formulated using dedicated animal origin-free equipment at our cGMP compliant facility.
- 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^2 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.

(Optional) Dilute TrypLE™ Select 10X

TrypLE™ 10X stock solution is designed for the dissociation of attachment-dependent cell lines with strong adhesive properties. TrypLE™ 10X can be used at the 10X concentration or diluted as desired for the dissociation of general cell lines from plasticware. Dilute TrypLE™ 10X as follows:

1. Prepare a 100 mM EDTA pH 8.0 (100X) solution. Filter (0.2-µm pore size) to sterilize.

2. Aseptically prepare DPBS/1 mM EDTA buffer by adding 1 mL of 100X EDTA Solution (from Step 1) to 99 mL of DPBS without calcium and magnesium.

3. Aseptically dilute TrypLE™ Select 10X to desired concentration in DPBS/1 mM EDTA buffer.

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

Limited product warranty

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For descriptions of symbols on product labels or product documents, go to **thermofisher.com/symbols-definition**.