gibco by life technologies™

TrypLE™

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.

Product	Catalog no.	Amount	Storage	Shelf life*
TrypLE™ Express (1X), no phenol red	12604-013 12604-021 12604-039 12604-054	100 mL 500 mL 20 × 100 mL 5 L	15°C to 30°C; Protect from light	24 months
TrypLE™ Express (1X), phenol red	12605-010 12605-028 12605-036 12605-093	100 mL 500 mL 20 × 100 mL 5 L	15°C to 30°C; Protect from light	24 months
TrypLE™ Select (1X), no phenol red	12563-011 12563-029	100 mL 500 mL	15°C to 30°C; Protect from light	24 months
TrypLE™ Select (10X), no phenol red	A12177-01 A12177-02 A12177-03	100 mL 500 mL 20 × 100 mL	15°C to 30°C; Protect from light	24 months

*Shelf life duration is determined from Date of Manufacture.

Product use

TrypLE™ Express:

For Research Use Only. Not for use in diagnostic procedures.

TrypLE™ Select:

Caution: For manufacturing, processing, or repacking.

Important information

- TrypLE™ Select is formulated on 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.

Safety information

Read the Safety Data Sheets (SDSs) and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves.

Use

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. Transfer 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.

TrypLE™ Select 10X dilution

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

Related products

Product	Catalog no.
Dulbecco's 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

Explanation of symbols and warnings

The symbols present on the product label are explained below:

				
Use By:	Manufacturer	Batch code	Keep away from light	Temperature Limitation
				
Catalog number	Consult instructions for use	Caution, consult accompanying documents	Sterilized using aseptic processing techniques	

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 found on Life Technologies' website at **www.lifetechnologies.com/termsandconditions**. If you have any questions, please contact Life Technologies at **www.lifetechnologies.com/support**.

Important licensing information

These products may be covered by one or more Limited Use Label Licenses. By use of these products, you accept the terms and conditions of all applicable Limited Use Label Licenses.

For additional technical information such as Safety Data Sheets (SDS), Certificates of Analysis, visit www.lifetechnologies.com/support
For further assistance, email **techsupport@lifetech.com**