

Innovate and save with Life Science-opoly Save now >



Home > Shop All Products > Cell Culture Media, Supplements, And Reagents > Cell Culture Reagents, Antibiotics And Supplements > Dissociation Reagents > TrypLE™ Express Enzyme (1X), No...



[Certificates](#) [SDS](#)

Gibco™

# TrypLE™ Express Enzyme (1X), no phenol red

TrypLE Express is an animal origin-free, recombinant enzyme used for dissociating a wide range of adherent mammalian cells, including [Read more](#)

**Promotion** Promo code: **P5661332** Get 3 for the price of 2

**Promotion** Promo code: **P5601075** Save with Life Science-opoly

Have Questions? [Contact Us](#)

Change view



Catalog Number	Quantity
<a href="#">12604013</a>	100 mL
12604021	500 mL

[Save now](#)

Save now

Innovate and save with Life Science-opoly



<b>12604054</b>	1 universal bag(s)
-----------------	--------------------

**Catalog number** 12604013 ★

Price (EUR) / 100 mL  
**29,65**  
 Online exclusive  
~~31,33~~  
 Save 1,68 (5%)

In stock

Add to cart

**Quantity:** 100 mL

[Customize this product](#)

- Product Overview**
- Recommendations
- Documents
- FAQ
- Citations & References

TrypLE Express is an animal origin-free, recombinant enzyme used for dissociating a wide range of adherent mammalian cells, including CHO, HEK 293, A529, primary human keratinocytes, and embryonic stem cells. TrypLE Express cleaves peptide bonds on the C-terminal sides of lysine and arginine, and is a direct replacement for trypsin. Its exceptional purity increases specificity and reduces damage to cells that can be caused by other enzymes present in some trypsin extracts. We offer a variety of [TrypLE formulations](#) for a range of cell culture applications. Compared to trypsin and other dissociation reagents, TrypLE Express is:

- Gentle on cells
- Room temperature-stable
- Easy to use
- Animal origin-free (AOF)

**This TrypLE Express is modified as follows:**

With Without

- EDTA • Phenol Red

The [formulation](#) of TrypLE solutions is available, although we keep the enzyme concentration confidential.

**Gentle on cells**

Save now

Innovate and save with Life Science-opoly

ThermoFisher  
SCIENTIFIC



TrypLE Express remains stable for 24 months at room temperature or 2–8°C, making storage and handling easy and convenient.

### Easy to use

TrypLE Express can be directly substituted for trypsin in existing protocols. In addition, dilution alone inactivates TrypLE Express, avoiding the need for trypsin inhibitors, such as FBS.

### Animal origin-free (AOF)

Unlike porcine trypsin, TrypLE Express is free of animal-derived components.

### cGMP manufacturing and quality system

For supply chain continuity, we manufacture Gibco TrypLE Express Enzyme (1X), no phenol red at two separate facilities located in Grand Island, NY and Scotland, UK. Both sites are compliant with cGMP manufacturing requirements and are certified to the ISO 13485 standard.

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

Specifications	
Chelators	EDTA
Cell Type	Mammalian Cells
Classification	Animal Origin-free
Concentration	1 X
Culture Type	Adherent Cell Culture
Form	Liquid
Product Type	Cell Culture Dissociation Reagent
Shelf Life	24 Months
Sterility	Sterile-filtered
Without Additives	No Phenol Red
Green Features	Energy efficient, Sustainable packaging
Osmolality	Check and Record
pH	6 to 8
Product Line	Gibco™

Innovate and save with Life Science-opoly

THERMOFISHER  
SCIENTIFIC

<b>Shipping Condition</b>	Room Temperature
<b>Source</b>	Animal origin-free
<b>Tested For</b>	In vitro Bioassay
<b>Unit Size</b>	100 mL

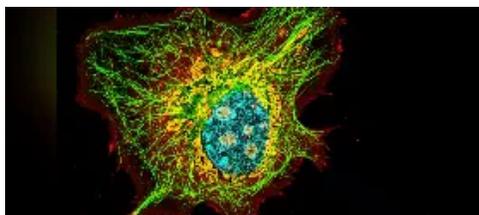
## Contents & Storage

**Storage conditions:** 15°C to 30°C, protect from light

**Alternate storage conditions:** 2°C to 8°C or -5°C to -20°C

**Shipping conditions:** Room temperature

**Shelf life:** 24 months from date of manufacture



**Follow the 5 steps to publication-quality fixed-cell imaging.**

[Download your free 5-step guide today >](#)



[Explore Gibco TrypLE Enzymes to enable gentle cell dissociation >](#)

## Media Formulations

TrypLE™ Express (1X), no phenol red

Save now

Innovate and save with Life Science-opoly



<p><b>Penicillin-Streptomycin (10,000 U/mL)</b> Catalog number: 15140122</p> <p><b>24,40</b> / 100 mL</p> <p>Add to cart</p>	<p><b>GlutaMAX™ Supplement</b> Catalog number: 35050061</p> <p><b>69,50</b> / 100 mL</p> <p>Add to cart</p>	<p><b>Trypsin-E phenol re</b> &gt;</p> <p>Catalog number: 12604013</p> <p><b>23,58</b> / 1</p> <p>Add to cart</p>
----------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------

## Documents & Downloads

### Certificates

Search by lot number or partial lot number Search

Lot #	Certificate Type	Date	Catalog Number(s)
<a href="#">2993996</a>	Certificate of Analysis	Nov 20, 2024	12604013, 12604054, 12604021
<a href="#">2994008</a>	Certificate of Analysis	Nov 15, 2024	12604013, 12604054, 12604021
<a href="#">2995086</a>	Certificate of Analysis	Nov 13, 2024	12604013, 12604054, 12604021
<a href="#">2993993</a>	Certificate of Analysis	Nov 03, 2024	12604013, 12604054, 12604021
<a href="#">2959722</a>	Certificate of Analysis	Oct 18, 2024	12604013, 12604054, 12604021

Its displayed, search above for a specific certificate

Save now

Save now

Innovate and save with Life Science-opoly



## Scientific Resources

### Reference Materials

-  [TrypLE enzymes green fact sheet](#)
-  [White Paper: Dissociation with TrypLE Express Enzyme maintains cell health and preserves surface marker expression](#)

### Brochures

-  [Pluripotent Stem Cell Product Guide](#)
-  [GIBCO Casepacks](#)
-  [Universal Bag Brochure - Its in the Bag](#)

### Flyers

-  [Flyer: TrypLE Express Product](#)

### Posters

-  [Proliferative & phenotypic characterization of human mesenchymal stem cells by flow cytometry & imag](#)

### Technical Notes

-  [Technical Note: Using TrypLE Express Enzyme for dissociation of adherent primary cells](#)

## Product Information

Save now

Innovate and save with Life Science-opoly

THERMOFISHER  
SCIENTIFIC [Product Insert: TrypLE \(Japanese\)](#) [User Guide: TrypLE Express](#) [TrypLE Express - Japanese](#)

## Limited Use Label Licenses (LULL)

License #591 - TrypLE™ Express/Select - Internal Research and Bioproduction Use for Mammalian and Insect Cell Culture



## Protocols

[RNA Isolation and cDNA Preparation from Neural Stem Cells](#) [Dissociation of Cells from Primary Tissue](#) [Culturing Human Neural Stem Cells](#) [Transfecting Plasmid DNA Into DU 145 Cells Using Lipofectamine 3000 Reagent](#) [Transfecting Plasmid DNA Into Hep 3B2.1-7 Cells Using Lipofectamine 3000 Reagent](#) [Transfecting Plasmid DNA Into LNCaP Cells Using Lipofectamine 3000 Reagent](#) [Isolation, Primary Culture, and Cryopreservation of Human Neonatal Fibroblasts](#) [Transfecting Plasmid DNA Into Hs 578T Cells Using Lipofectamine 3000 Reagent](#) [Transfecting Plasmid DNA Into MCF10A Cells Using Lipofectamine 3000 Reagent](#)

## Frequently asked questions (FAQs)

What is the difference between TrypLE Express Enzyme, TrypLE Select Enzyme, and CTS TrypLE Select Enzyme?



What are the benefits of Gibco TrypLE reagent over trypsin?



Do you offer media without phenol red (phenol red-free media)?



What reagents do you offer for cell dissociation, and what are the main differences between them?



your TrypLE products, how does the enzyme get inactivated?



Innovate and save with Life Science-opoly

THERMOFISHER  
SCIENTIFIC

## Citations & References

[Isolation and cultivation of human keratinocytes from skin or plucked hair for the generation of induced pluripotent stem cells.](#) [↗](#)

**Authors:** Aasen T, Izpisua Belmonte JC,

**Journal:** Nat Protoc

**PubMed ID:** 20134422

[A simple tool to improve pluripotent stem cell differentiation.](#) [↗](#)

**Authors:** Chetty S, Pagliuca FW, Honore C, Kweudjeu A, Rezania A, Melton DA,

**Journal:** Nat Methods

**PubMed ID:** 23584186

[VCAM-1 expression in adult hematopoietic and nonhematopoietic cells is controlled by tissue-inductive signals and reflects their developmental origin.](#) [↗](#)

**Authors:** Ulyanova T, Scott LM, Priestley GV, Jiang Y, Nakamoto B, Koni PA, Papayannopoulou T,

**Journal:** Blood

**PubMed ID:** 15769895

[A rapid, cost-effective method for counting human embryonic stem cell numbers as clumps.](#) [↗](#)

**Authors:** Prowse A, Wolvetang E, Gray P,

**Journal:** Biotechniques

**PubMed ID:** 19594444

## Abstract

'The ease of generating induced pluripotent stem (iPS) cells, and possibly their properties after reprogramming, depends on the origin of the somatic cell starting population. Reprogramming of keratinocytes is both faster and more efficient compared with fibroblasts, although more care is required when isolating, culturing and infecting these cells. In ... [More](#)

We describe a method to help overcome restrictions on the differentiation propensities of human pluripotent stem cells. Culturing pluripotent stem cells in dimethylsulfoxide (DMSO) activates the retinoblastoma protein, increases the proportion of cells in the early G1 phase of the cell cycle and, in more than 25 embryonic and induced ... [More](#)

Although expression of vascular cell adhesion molecule 1 (VCAM-1) in endothelial cells and its functional implications have been previously appreciated, VCAM-1 expression in other than endothelial cells, especially hematopoietic cells, has been recently recognized and has not been explored in detail. Using normal mice and mice with a conditional ablation ... [More](#)

Enumeration of human embryonic stem cell (hESC) numbers through single cell digestion can be time consuming especially in high-throughput or multi-factorial analysis containing 50+ samples. We have developed a reproducible, cost-effective method of counting hESCs in clumps circumventing the need to manually dissociate each sample to single cells. The method ... [More](#)

Save now

Innovate and save with Life Science-opoly



Nakamura N, Ferreira JRM, Gomoll AH, Hernandez AJ, Bueno DF,

**Journal:** Tissue Eng Part C Methods

**PubMed ID:** 30412046

population and 36% among athletes. Despite Autologous Chondrocyte Implantation (ACI) versatility, it still fails to fully reproduce hyaline articular cartilage characteristics. Mesenchymal ... [More](#)

5 total citations

## Other products to consider

**NucBlue™ Fixed Cell ReadyProbes™ Reagen...**

Catalog number: R37606

**164,00** / 1 kit

[Add to cart](#)

Save now