



# Recombinant Trypsin Solutions

An animal components-free cell dissociation solutions, designed as an alternative to porcine trypsin for the dissociation of cells

## Recombinant Trypsin Solution

Cat. No.: 03-078-1B 100ml  
03-078-1C 20ml

## Recombinant Trypsin-EDTA Solution

Cat. No.: 03-079-1B 100ml  
03-079-1C 20ml

Store at: Room Temperature

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## Instructions for Use

### Product Description

Special, animal components-free (ACF) recombinant trypsin solutions, developed as an alternative to porcine trypsin. The solutions do not contain any chymotrypsin, carboxypeptidase A, and other protease contaminant.

Recombinant Trypsin Solution formulations were developed for efficient dissociation of adherent cell types from surfaces and tissues and were optimized for sensitive cells, such as primary human mesenchymal stem cells (hMSC). The addition of EDTA usually accelerates the dissociation phase.

Recombinant Trypsin Solutions are pure enzyme solutions, which help maximize the yield of functionally viable cells from culture vessels, while preventing the toxicity effect induced by other non desirable proteases. In addition, recombinant trypsin eliminates the risk of viruses, or other potential adventitious agents found in animal derived components.

### Source

Recombinant Trypsin Solutions are produced by submerged microbial fermentation. They are derived from a production process which does not utilize any raw materials and/or processing aids of animal origin.

### Features

- Ready-to-use
- Non-animal or human origin
- Increased specificity
- Eliminates contaminating activities found in bulk production of enzymes
- Free from undesirable proteases such as carboxypeptidase A and chymotrypsin
- Optimized for hMSC (from a variety of sources), cultured in both serum-free and serum-containing systems

### Precaution and Disclaimer

1. For in vitro use only.
2. Do not use if a visible precipitate is observed in the solution.
3. Do not use beyond the expiration date indicated on the product label.

## Storage and Stability

Stable at room temperature (15-30°C) until the expiry date stated on the label.

## Instructions for use

The following instructions are applicable for most cell lines. Actual procedures and concentrations should be determined by experience with individual cell lines (see notes below).

1. Wash the cells with DPBS w/o Ca, Mg (Cat No. 02-023-1).
2. Add 1ml of Recombinant Trypsin Solution to each T-25 tissue culture flask.
3. Incubate the flask at 37°C for 2 min or longer as necessary. Verify cell's detachment using inverted microscope.  
The time needed to dislodge cells will vary depending upon cell type, cell density and medium used.
4. When cells are completely detached, add 5-10 ml of culture medium (MSC NutriStem® XF, Cat. No. 05-200-1). Alternatively use diluted (1:50, in DPBS) Soybean Trypsin Inhibitor (SBTI, Cat. No. 03-048-1).
5. Pellet the cells by centrifugation, and discard the supernatant.
6. Resuspend the cells in growth medium, and seed as desired.

## Quality Control

Recombinant Trypsin Solution performance is tested on hMSC. Additional standard evaluations are pH, Osmolality and sterility tests.

## Auxiliary products

Product	Cat. No.	Unit Size	Storage Temp.
MSC NutriStem® XF Basal Medium	05-200-1A 05-200-1B	500ml 100ml	2-8°C 2-8°C
MSC NutriStem® XF Supplement Mix	05-201-1U 05-201-1-06	3ml 0.6ml	-20°C -20°C
MSC Attachment Solution	05-752-1H 05-752-1F	5ml 1ml	2-8°C 2-8°C
MSC Freezing Medium	05-712-1E 05-712-1D	50ml 10ml	2-8°C 2-8°C
Soybean Trypsin Inhibitor 50X	03-048-1C	20ml	-20°C
Dulbecco's PBS (w/o Ca & Mg)	02-023-1B 02-023-1A	100ml 500ml	RT RT



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