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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

REF 03-078-1

Recombinant Trypsin-EDTA Solution

REF 03-079-1

Room Temperature

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. Do not use if a visible precipitate is observed in the solution.
2. Do not use beyond the expiration date indicated on the product label.
3. Caution: not for direct administration into humans or animals.

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
MSC NutriStem® XF Supplement Mix	05-201-1U 05-201-1-06	3ml 0.6ml	-20°C
MSC Attachment Solution	05-752-1H 05-752-1F	5ml 1ml	2-8°C
NutriFreeze™ D10 Cryopreservation Medium	05-713-1A 05-713-1B 05-713-1C 05-713-1D 05-713-1E	500ml 100ml 20ml 10ml 50ml	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

Quality Assurance

- For in vitro diagnostic use, research use or for use as ancillary material in manufacturing Cell-Gene or Tissue-based products.
- Notified under US FDA IVD part 864.9225 Cell-freezing apparatus and reagents for in vitro diagnostic use.
- Listed in Europe under CE IVD class I, thus comply with European In-Vitro Diagnostic Devices Directive (98/79/EC) requirements.
- Manufactured under ISO 13485 QMS and in compliance with applicable cGMP guidelines.
- Manufactured under controlled environments and processes in accordance with:
  - ISO 13408 – Aseptic Processing of Health Care Products;
  - ISO 14644 – Airborne Particulate Cleanliness Classes in Clean Rooms and Clean Zones;

EC REP

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Product Label Symbols

IVD	Indicates a medical device that is intended to be used as an in vitro diagnostic medical device.
CE	The product meets the requirements of the applicable EC directives
REF	Indicates the manufacturer's catalogue number so that the medical device can be identified.
STERILE A	Indicates a medical device that has been manufactured using accepted aseptic techniques.