

TrypLiber Cell Dissociation Solution

Product Name TrypLiber Cell Dissociation Solution

Cat. No. & Specifications

Product Name	Cat. No.	Packing Specification	Grade
TrypLiber Cell Dissociation Solution (1×)	CS-TL-100	100 mL	RUO
TrypLiber Cell Dissociation Solution (1×)	CS-TL-500	500 mL	RUO
TrypLiber Cell Dissociation Solution (1×)	CS-GTL-100	100 mL	GMP
TrypLiber Cell Dissociation Solution (1×)	CS-GTL-500	500 mL	GMP
TrypLiber Cell Dissociation Solution (10×)	CS-TL-100-2	100 mL	RUO
TrypLiber Cell Dissociation Solution (10×)	CS-TL-500-2	500 mL	RUO
TrypLiber Cell Dissociation Solution (10×)	CS-GTL-100-2	100 mL	GMP
TrypLiber Cell Dissociation Solution (10×)	CS-GTL-500-2	500 mL	GMP

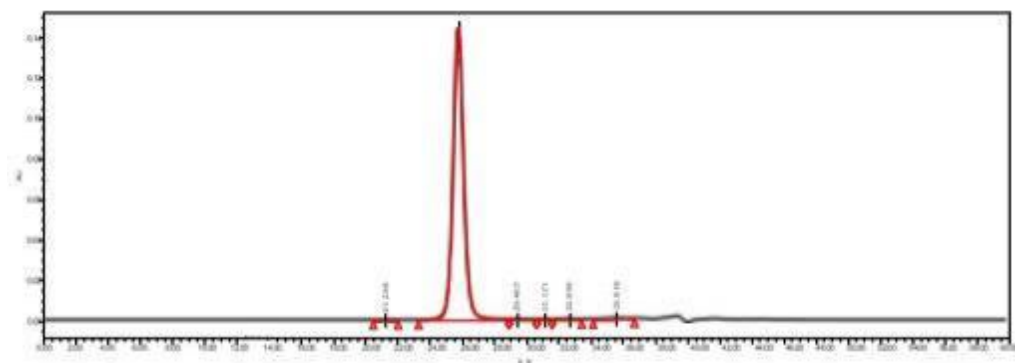
Expected Use For digestion used in adherent cell culture

1. Acquisition of primary cells for digestion and dissociation of tissue sections
2. For passage digestion of adherent cells
3. For cell digestion in microcarrier culture methods

Parameter	Specification
Sequence Source	Fusarium Oxysporum
External Appearance Term	Vitrification
Molecular Weight	22.2 kDa
Purity (size exclusion chromatography)	≥95%
Specific Activity*	≥27000 U/mg
Activity (BAEE)	≥250 U/mL
Endotoxin	<1 EU/mL
Sterility	Aseptic should be ensured
Optimal pH	7.0-7.4

Identity

*Definition of enzyme activity unit: At 25°C, pH 7.6, in a reaction system of 3.2 mL (1 cm optical path length), an increase of 0.003 in the absorbance value at 253 nm per minute when BAEE (N-Benzoyl-L-Arginine-Ethyl ester) is enzymatically hydrolyzed is defined as one activity unit (Unit/mg protein) (China Pharmacopoeia, 2025 edition).

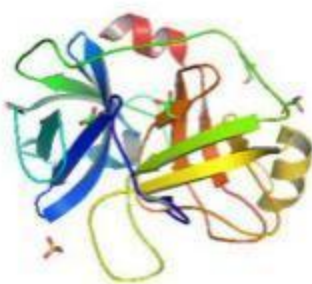


SEC-HPLC enzyme purity determination

Product Description

TrypLiber (EC: 3.4.21.4) is a trypsin-like protease derived from *Fusarium oxysporum*, which was expressed and purified from *Escherichia coli*. This enzyme exhibits identical cleavage sites and pH activity range to trypsin, capable of cleaving the carboxyl termini of arginine and lysine residues in protein sequences.

TrypLiber enzyme has been demonstrated in cellular experiments to effectively dissociate adherent mammalian cell lines, exhibiting dissociation kinetics similar to that of porcine trypsin while demonstrating lower cytotoxicity. The cell replication, proliferation kinetics, and long-term viability are consistent with those observed in cells harvested using animal trypsin. Purity analysis indicates that TrypLiber exhibits higher purity, greater molecular stability, and superior activity retention compared to conventional trypsin.



TrypLiber 3D structure diagram

Storage conditions and shelf life

Store at 2-8 °C away from light for up to 24 months.

Instructions for Use

1. TrypLiber can be used at room temperature or preheated to 37°C before use for optimal digestion.
2. Operating Procedures (using a T25 culture flask as an example)
 - 2.1 Perform digestion and passage when the cells in the T25 culture have achieved over 90% fusion.
 - 2.2 Remove the cell culture medium and add 5mL of PBS for washing (if serum-free medium is used, one wash is sufficient; if serum-containing medium is used, wash the cells three times consecutively to ensure complete removal of serum residues, otherwise the digestion time will be prolonged).
 - 2.3 Add 2 mL of TrypLiber enzyme per bottle and incubate at 37 °C or room temperature for 3 minutes for digestion (the digestion time varies depending on the cell type; adjust accordingly).
 - 2.4 If the cells become round, immediately add 4mL of PBS or complete culture medium for dilution.
 - 2.5 Transfer the aforementioned cell suspension to a centrifuge tube and centrifuge at 1300 rpm (300 g) for 5 minutes.
 - 2.6 Remove the supernatant from the centrifuge tube.
 - 2.7 Select the appropriate culture medium (for cell passage) or cryopreservation solution (for cell cryopreservation) based on experimental objectives.
3. The recommended dilution solutions for TrypLiber digestion medium are PBS or normal saline; if the digestion medium concentration is too high, it may be appropriately diluted.

Statistics on the amount of digestive enzymes used in different culture bottles

Culture-Flask	Volume of Digestive Enzyme Addition	Volume of Diluent Added
T25	2 mL	4 mL
T75	5 mL	10mL
T175	10mL	20 mL

Contact

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