

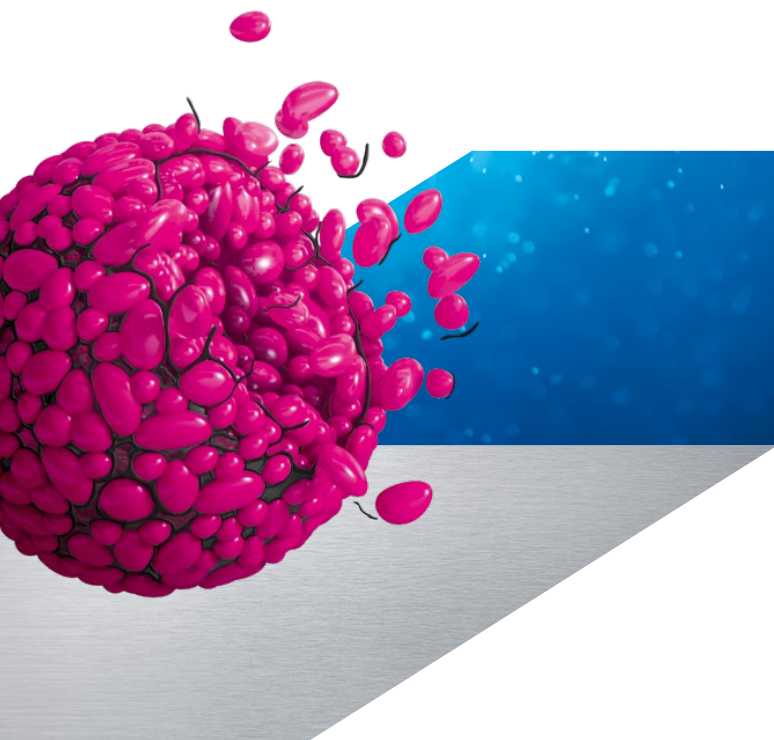
Liberase MNP-S, GMP Grade

Optimal cell isolation outcomes for downstream applications

Liberase MNP-S is a sterile*, high-quality blend of extremely purified Collagenase I/II and Thermolysin developed for use in a variety of downstream clinical applications, including:

- chondrocyte isolation
- stem cell isolation from adipose tissue
- stem cell isolation from tumors
- tissue engineering

* Sterility of final product is tested according to requirements European Pharmacopeia 2.6.1 and US Pharmacopeia 71



- **Maximum cell yield, viability, and functionality**
Use of high-specific-activity blends with reduced clostripain, trypsin, and endotoxin content maximizes yield of viable, functional cells.
- **Reduced contamination risk**
Manufactured free of any mammalian- or avian-derived raw materials, avoiding the risk of transmission of animal diseases.
- **High experimental reproducibility**
High lot-to-lot consistency due to optimized enzyme fermentation and purification processes results in increased experimental reproducibility, ultimately saving time and resources.
- **Flexible enzyme portfolio**
Custom sizes and blends are available upon request to better serve your unique application needs.
- **Specific residual assay**
Highly sensitive assay developed specifically for detection of Liberase enzyme verifies removal from your final product.

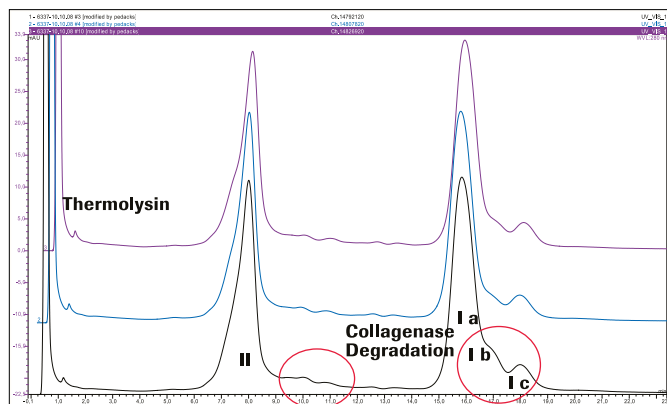


Figure 1: Liberase MNP-S with medium content of Thermolysin shows minimal degradation of Collagenase I and II reproducibly in three different lots due to a proprietary blending process.

Specifications

Liberase MNP-S, GMP Grade, Sterile

Catalog number	06 297 790 001
Content	Collagenase I/II blend plus Thermolysin
Appearance	white lyophilizate
Total protein	6.9 mg/vial
Activity (Wünsch, calculated)	19 - 32 U/vial
Activity (Thermolysin, calculated)	19,140 - 37,000 U/vial
Endotoxin	<50 EU/mg
Stability	36 months at -15 to -25°C



Figure 2: The blade structure of Liberase formulations allows the enzymes to dissolve efficiently in solution.

Ordering information

Related products	Pack size	Catalog number
Liberase MNP-S, Sterile	35 mg	05 578 566 001
Liberase MTF C/T, GMP Grade	2 x 500 mg	05 339 880 001
Liberase T-Flex, Research Grade	500 mg	05 989 132 001
DNase I, recombinant, GMP Grade	4 kU	03 724 751 103
DNase I, recombinant	10 kU 510 kU	03 724 778 103 05 952 077 103
DNase I, recombinant, RNase-free	custom fill	03 539 121 103
Trypsin, recombinant, GMP Grade	3.5 MU 1 g	03 358 658 103 06 369 880 103
Residual Protein Liberase Kit	kit for 96 reactions	07 758 693 001
Collagenase Activity Test	kit for 96 reactions	08 074 461 001
Residual Trypsin Test Kit	kit for 96 reactions	07 568 975 001

Regulatory disclaimer

For further processing only.

Intended use: Blended proteolytic enzyme for tissue dissociation.

Trademark

LIBERASE is a trademark of Roche. All other product names and trademarks are the property of their respective owners.

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