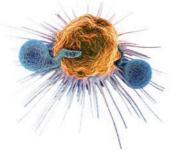
New Product

We listened to You!

Specially designed animal-free GMP Collagenase for Tumor Cells, TILs, SVF & More



- Highly Purified Collagenase Extremely low endotoxins
- Exceptionally Safe No risk of TSE & animal pathogens
- For Sensitive Cells Keeps cell surface proteins intact

Cancer cell attacked by lymphocytes

Clostridium on a Veggie Diet



For Collagenase AF-1 GMP Grade (≥ 150 U),

Nordmark has developed a process that keeps *Clostridium histolyticum* on a veggie diet in order to avoid any cross-contamination with animalderived material. By excluding the entry of any pathogen, Collagenase AF-1 GMP Grade is perfectly designed for clinical applications.

Regulatory requirements for ancillary materials have increased the demand for **safe, sustainable and high-quality GMP** products. Nordmark's animal-free product line meets those demands and continues to expand with the latest product, Collagenase AF-1 GMP Grade (\geq 150 PZ U).

Collagenase AF-1 GMP Grade is very **sensitive to cells** and **keeps surface receptors intact**. This makes it an excellent fit for tumor cell isolation and digestion of adipose tissue. Additional enzymatic activities are often necessary to break the cell bonds. For this instance, Collagenase AF-1 can be individually dosed together with Neutral Protease AF GMP Grade.



Product Information

Enzyme	Collagenase AF-1 GMP Grade		
Origin	Clostridium histolyticum		
Composition	Collagenase class I and class II, 70 – 120 kDa (collagenases)		
Special features	Manufactured free from animal components & according to international GMP guidelines		
Character	White to off-white, 0.2 μm filtered, chromatographically highly purified, lyophilisate		
Protein content	Lowry assay	> 95 %	
Identification	SDS-PAGE	Position of main bands must comply	
Test	Water	≤ 15 % (w/w)	
Microbiological examination	TAMC (Total Aerobic Microbial Count)	≤ 10/Vial	
	TYMC (Total Yeasts/Moulds Count)	≤ 10/Vial	
	Absence of Clostridia	Must comply	
Activities	Collagenase (PZ activity according to Wünsch, 25 °C)	≥ 150 PZ U/Vial	
	Collagenase (PZ activity according to Wünsch, 25 °C)	≥ 3.000 U/mg lyophilisate	
	Neutral Protease (DMC assay)	≤ 0.050 U/mg lyophilisate	
	Clostripain, native state (BAEE assay)	Status	
Bacterial endotoxins	LAL assay	≤ 10.0 EU/mg lyophilisate	
Long term stability data	5 °C ± 3 °C 2 years (after manufacture)*		

* ongoing ICH study

Ordering Information

Enzyme	Cat. No.	Pack Size
Collagenase AF-1 GMP Grade	N0003855	≥ 150 PZ U
	N0003554	≥ 2000 PZ U
Neutral Protease AF GMP Grade	N0003553	\geq 100 DMC U

For information and samples please contact the Nordmark Biochemicals Team

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Ordering

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Nordmark

 Collagenase
 AF-1
 GMP Grave

 150 PZ U/Vial
 Store at +2 to +1

 Lot 12345678
 Re-evaluation date

 cf. CoA
 CAS (9001-12-1) | EC no. 232-56

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