



CERTIFICATE OF ANALYSIS

Collagenase MA, Catalog # 001-2020
GMP Grade – For *ex vivo* Use Only

Product: Aseptically dispensed mixture of purified Class 1 (60%) and Class 2 (40%) Collagenase from *C. histolyticum*

Lot # 224171207	SPECIFICATION	RESULT
Appearance	White lyophilized cake	White lyophilized cake
Specific Wünsch Activity ¹	> 2.80 Units/mg	4.64 Units/mg
Total Wünsch Activity	1,000 – 1,400 Units/bottle	1,112 Units/bottle
Specific Collagen Degrading Activity ²	15,000 – 30,000 U/mg	23,824 Units/mg
Endotoxin EU/mg protein ³	< 10.0 EU/mg	3.97 EU/mg
Total Protein ⁴	Report Only	239.7 mg/bottle

STORAGE: < -20°C

DATE OF MANUFACTURE: 7 Dec 2017

EXPIRY DATE: December 2019

Signature:

Andrew Breite, Director of Quality Assurance

15 Dec 2017

¹ Wünsch E, Heidrich H-G. Zur quantitativen bestimmung der kollagenase. *Hoppe-Seyler's Zeitschrift Physiologische Chemie* 333 (1963);149-151

² McCarthy RC, et. al. Development and Characterization of a Collagen Degradation Assay to Assess Purified Collagenase Used in Islet Isolation. *Transplantation Proceedings* 40 (2008); 339-342

³ Charles River Endosafe® PTS Endotoxin Assay

⁴ Based on absorbance at 280 nm using an extinction coefficient of $\epsilon=1.41$

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