



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 # 224190214	SPECIFICATION	RESULT
Appearance	White lyophilized cake	White lyophilized cake
Specific Wünsch Activity ¹	> 2.80 Units/mg	5.32 Units/mg
Total Wünsch Activity	1,000 – 1,400 Units/bottle	1,163 Units/bottle
Specific Collagen Degrading Activity ²	15,000 – 30,000 U/mg	27,431 Units/mg
Endotoxin EU/mg protein ³	< 10.0 EU/mg	4.18 EU/mg
Total Protein ⁴	Report Only	218.6 mg/bottle

STORAGE: < -20°C

DATE OF MANUFACTURE: 14 Feb 2019

EXPIRY DATE: Feb 2021

Signature:

Andrew Breite, Director of Quality Assurance

19 Feb 2019

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 $\epsilon=1.41$

VitaCyte, LLC

1341 Sadlier Circle West Drive

Indianapolis, IN 46239

www.vitacyte.com

Phone: 317.917.3457

Fax: 317.917.3459