



CERTIFICATE OF ANALYSIS

Collagenase MA, Catalog # 001-2030
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 # 122190620 | SPECIFICATION | RESULT |
|---|----------------------------|------------------------|
| Appearance | White lyophilized cake | White lyophilized cake |
| Specific Collagen Degrading Activity ¹ | 15,000 – 30,000 U/mg | 27,648 Units/mg |
| Total Collagen Degrading Activity | 2.25 – 2.75 M Units/bottle | 2,731,180 Units/bottle |
| Total Protein ² | Report Only | 98.8 mg/bottle |
| Endotoxin EU/mg protein ³ | < 10.0 EU/mg | 3.5 EU/mg |

STORAGE: < -20°C

DATE OF MANUFACTURE: 20 Jun 2019

EXPIRY DATE: Jun 2021

Signature:

Andrew Breite, Director of Quality Assurance

11 Jul 2019

¹ 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

² Based on absorbance at 280 nm using an extinction coefficient of $\epsilon=1.41$

³ Charles River Endosafe® PTS Endotoxin Assay

VitaCyte, LLC

1341 Sadlier Circle West Drive

Indianapolis, IN 46239

www.vitacyte.com

Phone: 317.917.3457

Fax: 317.917.3459