

CERTIFICATE OF ANALYSIS

Collagenase MA, Catalog # 001-2020 For Research Use Only

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

| Lot # 224160421 | SPECIFICATION | RESULT |
|---|-------------------------------------|------------------------|
| Appearance | White lyophilized cake | White lyophilized cake |
| Specific Wunsch Activity ¹ | > 2.80 Units/mg | 4.54 Units/mg |
| Total Wunsch Activity | 1000 - 1400 Units/bottle | 1002.8 Units/bottle |
| Endotoxin EU/mg protein ² | < 10.0 EU/mg | 3.09 EU/mg |
| Specific Collagen Degrading Activity ³ | 15,000 ⁻ 30,000 Units/mg | 27,826 Units/mg |
| Total Protein⁴ | Report Only | 220.9 mg/bottle |

STORAGE: < -20°C DATE OF MANUFACTURE: 21 April 2016

EXPIRY DATE: April 2018

Signature:

Andrew Breite, Director of Quality Assurance

31 May 2016

Based on absorbance at 280 nm using an extinction coefficient of 0.1% = 1.41

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

Charles River Endosafe® PTS Endotoxin Assay

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