



CERTIFICATE OF ANALYSIS

Collagenase HA, Catalog # 001-1050
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 # 241180222	SPECIFICATION	RESULT
Appearance	White lyophilized cake	White lyophilized cake
Specific Wunsch Activity ¹	> 2.80 Units/mg	4.15 Units/mg
Total Wunsch Activity	175 – 225 Units/bottle	187.4 Units/bottle
Endotoxin EU/mg protein ²	< 10.0 EU/mg	7.78 EU/mg
Specific Collagen Degrading Activity ³	> 30,000 Units/mg	48,094 Units/mg
Total Collagen Degrading Activity	Report Only	2,173,385 Units/bottle
Total Protein ⁴	Report Only	45.2 mg/bottle

STORAGE: < -20°C

DATE OF MANUFACTURE: 22 Feb 2018

EXPIRY DATE: February 2020

Signature:

Andrew Breite, Director of Quality Assurance

28 Feb 2018

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

² Charles River Endosafe[®] PTS Endotoxin Assay

³ 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

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

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