



CERTIFICATE OF ANALYSIS

Collagenase HA, Catalog # 001-1050

GMP Grade – For *ex vivo* Use Only

REVISED FOR EXTENDED EXPIRY

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

Lot # 112190822	SPECIFICATION	RESULT
Appearance	White lyophilized cake	White lyophilized cake
Specific Wunsch Activity ¹	> 2.80 Units/mg	4.88 Units/mg
Total Wunsch Activity	175 – 225 Units/bottle	198.4 Units/bottle
Endotoxin EU/mg protein ²	< 10.0 EU/mg	5.85 EU/mg
Specific Collagen Degrading Activity ³	> 30,000 Units/mg	60,324 Units/mg
Total Collagen Degrading Activity	Report Only	2,452,774 Units/bottle
Total Protein ⁴	Report Only	40.7 mg/bottle

STORAGE: < -20°C

DATE OF MANUFACTURE: 22 Aug 2019

REVISED EXPIRY DATE: August 2023

Signature:

Andrew Breite, Director of Quality Assurance

23 Mar 2021

¹ Wunsch E, Heidrich H-G. Zur quantitativen bestimmung der kollagenase. *Hoppe-Seyler'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 $\epsilon=1.41$

VitaCyte, LLC

1341 Sadlier Circle West Drive

Indianapolis, IN 46239

www.vitacyte.com

Phone: 317.917.3457

Fax: 317.917.3459