

## **CERTIFICATE OF ANALYSIS**

## Cl*zyme* AS, Catalog # 005-1090 GMP Grade

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

Lot # 242170915	SPECIFICATION	RESULT
Appearance	White lyophilized cake	White lyophilized cake
Total Wunsch Activity <sup>1</sup>	30 – 40 Units/vial	34.9 Units/vial
Total Neutral Protease Activity <sup>2</sup>	220,000 – 350,000 Units/vial	320,604 Units/vial
Endotoxin EU/mg protein <sup>3</sup>	< 25.0 EU/OD 280 nm	13.8 EU/OD 280 nm
Total Collagen Degrading Activity <sup>4</sup>	Report Only	391,080 Units/vial

STORAGE: 2-8°C

## DATE OF MANUFACTURE: 15 Sept 2017 EXPIRY DATE: Sept 2019

Signature:

Andrew Breite, Director of Quality Assurance

20 September 2017

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<sup>&</sup>lt;sup>1</sup> Wünsch E, Heidrich H-G. Zur quantitativen bestimmung der kollagenase. *Hoppe-Seyler's Zeitschrift Physiologische Chemie* 333 (1963);149-151

<sup>&</sup>lt;sup>2</sup> Breite AG, et. al. Tissue Dissociation Enzyme Neutral Protease Assessment. *Transplantation Proceedings* 42 (2010);2052-54

<sup>&</sup>lt;sup>3</sup> Charles River Endosafe<sup>®</sup> PTS Endotoxin Assay

<sup>&</sup>lt;sup>4</sup> 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