

# Certificate

## COLLAGENASE I

USP Catalog No.: 1148089

USP Lot No.: F029B0

<p>IANTNSEKYD FEYLNGLSYT ELTNLIKNIK WNQINGLFNY STGSQKFFGD  KNRVQAIINA LQESGRITYA NDMKGIETFT EVLRAGFYLG YYNDGLSYLN  DRNFQDKCIP AMIAIQKNPN FKLGTAVQDE VITSLGKLIG NASANAEEVN  NCVPVLKQFR ENLNQYAPDY VKGTAVNELI KGIEFDFSGA AYEKDVKTMP  WYGKIDPFIN ELKALGLYGN ITSATEWASD VGIYYLSKFG LYSTNRNDIV  QSLEKAVDMY KYGKIAFVAM ERITWDYDGI GSNGKKVDHD KFLDDAEKHY  LPKTYTFDNG TFIIRAGDKV SEEKIKRLYW ASREVKSQFH RVVGNDKALE  VGNADDVLTM KIFNSPEEYK FNTNINGVST DNGGLYIEPR GTFYTYERTP  QQSIFSLEEL FRHEYTHYLQ ARYLVDGLWG QGPFEYKNRL TWFDEGTAEF  FAGSTRTSGV LPRKSILGYL AKDKVDHRYL LKKTLSNGYD DSDWMFYNYG  FAVAHYLYEK DMPTFIKMNK AILNTDVKSY DEIIKKLSDD ANKNTEYQNH  IQELADKYQG AGIPLVSDDY LKDHGYKKAS EVYSEISKA SLTNTSVTAE  KSQYFNTFTL RGTYTGETSK GEFKDWDEMS KKLDGTLESL AKNSWSGYKT  LTAYFTNYRV TSDNKVQYDV VFHGVLTDNA DISNNKAPIA KVTGPSTGAV  GRNIEFSGKD SKDEDGKIVS YDWDFGDGAT SRGKNSVHAY KKAGTYNVT  KVTDDKGATA TESFTIEIKN EDTTTPITKE MEPND DIKEA NGPIVEGTV  KGD LGSDDA DTFYFDVKED GDVTIELPYS GSSNFTWL VY KEGDDQNHIA  SGIDKNNSKV GTFKSTKGRH YVFIYKHDSA SNISYSLNIK GLGNEKLKEK  ENNDSSDKAT VIPNFNTTMQ GSLLGDDSRD YYSFEVKEEG EVNIELDKKD  EFGVTWTLHP ESNINDRITY GQVDGNKVS N KVKLRPGKYY LLVYKYS GSG  NYELRVNK</p>	CAS No.: 9001-12-1
	Molecular $C_{5099}H_{7771}N_{1329}O_{1610}S_{14}$ Formula: (for $\beta$ subtype)
	Molecular 113,897 daltons Weight: (for $\beta$ subtype)

**Additional Information:** The assigned value of Collagenase I RS Lot F029B0 was determined to be 0.28 units per mg of protein using 4-phenylazobenzoyloxycarbonyl (PZ)-Pro-Leu-Gly-Pro-D-Arg as the substrate (Wunsch assay) according to the Assay in USP General Chapter <89.1> Collagenase I. The protein concentration was determined to be 53 mg/mL. Thaw at room temperature and mix gently. Use immediately after thawing and mixing. Discard any remaining material after use.

**LABEL TEXT**

**USP REFERENCE STANDARD**  
**COLLAGENASE I 2 x 0.5 mL**

Store in freezer. For additional information see the USP Certificate.



**Danger!** May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Avoid breathing mist or vapor. In case of inadequate ventilation wear respiratory protection. If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center/doctor.

Dispose of contents/container in accordance with local/regional/national/international regulations.

**KEEP AMPULES IN SECONDARY CONTAINER!**

**LOT: F029B0**

USP, 12601 Twinbrook Pkwy, Rockville, MD, +1-301-881-0666  
Cat. No. 1148089 Material mfd. in Germany



For use with specified USP compendial tests.  
Not for use as a drug. See SDS prior to use at [www.usp.org/sds](http://www.usp.org/sds).

*Juri L. Ioth*

*Quality Assurance*

**Calculation Value**

If a value is not provided on the label or accompanying documentation and the Reference Standard has a quantitative USP compendial application, a value of 100.0% is used. The purity value is not applicable for qualitative uses. Please refer to the specific Reference Standard label for further information.

**Expiration**

Current lots are identified in the current USP Catalog. In some cases, the previous lot may still be considered valid for use. If so, it is identified in the column marked "Previous Lot/Valid Use Date."

It is the responsibility of each user to determine that this lot is current or valid when used. For the most up-to-date information, please refer to the USP Store at [www.usp.org](http://www.usp.org).

**Instructions for Use**

Follow the instructions on the label of the USP Reference Standard and in the appropriate USP documentary standard(s).

**Non-Monograph Use**

The suitability of this Reference Standard for use in non-compendial applications is solely the responsibility of the user.

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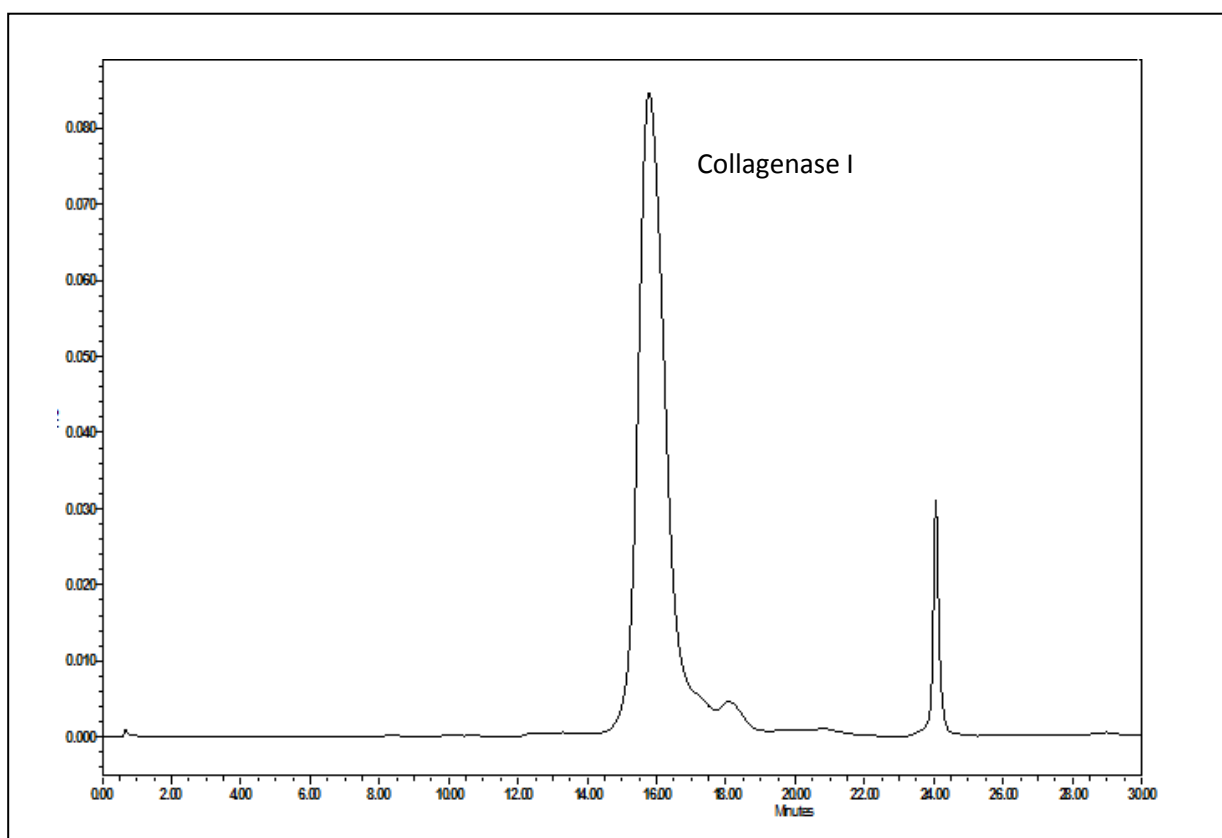
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# Typical Chromatogram

## USP Collagenase I RS

<b>Catalog Number:</b> 1148089
<b>Lot:</b> F029B0
<b>Monograph :</b> General Chapter <89.1> Collagenase I
<b>Publication:</b> PF 41(5)
<b>Test:</b> <i>Purity</i>
<b>Sample:</b> <i>Standard solution</i>



This chromatogram is supplied for information only, unless otherwise specified in an applicable monograph or general chapter.