

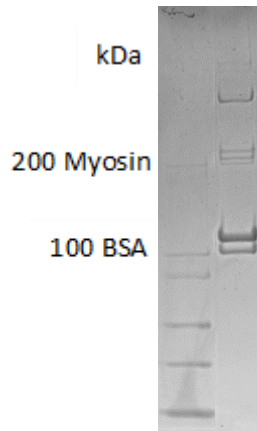
CERTIFICATE OF ANALYSIS

VitroCol®

Human, Type I Collagen Solution

Catalog No. 5007 Lot No. 7976 Exp Date: June 2022

<u>Parameter</u>	<u>Specification</u>	<u>Result</u>
Collagen Concentration (mg/mL)	2.9-3.2	3.1
Sterility (USP modified)	No Growth	Pass
Endotoxin LAL (EU/ml)	≤ 5.0	Pass
Gel Formation Tube Test (minutes)	≤ 90	Pass
Kinetic Gel Test (minutes)	≤ 90	Pass
Purity – SDS Page Silver Stain	≥ 99%	Pass
pH	1.9 - 2.1	2.0
Osmolality (mOsm/Kg H ₂ O)	≤ 35	27
Fibrillogenesis (Absorbance Units)	≥ 0.5	Pass
Young's Modulus E' (Pa)	Characteristic	Pass
Electrophoretic Pattern	Characteristic	Pass



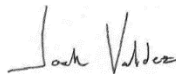
SDS-Page Coomassie Blue:

Lane 1: Standard

Lane 2: VitroCol®

≥85% collagen contained within alpha, beta, and gamma bands, <15% collagen contained within bands traveling faster than alpha

Signature on this certificate signifies conformance to current Advanced BioMatrix, Inc. specifications.



Authorized Signature

November 19, 2019

Date