

CERTIFICATE OF MATERIAL ORIGIN

Date: 10/27/2017 Revision: 02

Product: Tropoelastin, Human, Recombinant, Lyophilized

Supplier	Advanced BioMatrix, Inc.	
Supplier Catalog No.	5052	
Supplier Location	California, USA	
Name/Grade	Tropoelastin, Human, Recombinant, Lyophilized	
Animal Origin (including human)		
-Animal Species	Not applicable	
-Tissue Origin	Not applicable	
-County of Origin	Not applicable	
Non-animal Source of Origin		
-Country of Origin	United States	
Animal Origin Material Adventitious	Not applicable	
Agent Risk Reduction Steps		
Method of Manufacturing	Protein expression	
Briefly describe Method of Manufacturing	It contains one-third glycine amino acids and several lysine derivatives that serve as covalent crosslinks between protein monomers. Thus, elastin is a three-dimensional network with 60-70 amino acids between two crosslinking points. This molecular architecture is responsible for its elastic properties, insolubility, and resistance to proteolysis.	

The above information has been completed by an authorized representative of management and is complete and correct to my knowledge.

Daniel Bagley	President	October 27, 2017