



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 Agent Risk Reduction Steps	Not applicable
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.

President

October 27, 2017

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