



CERTIFICATE OF MATERIAL ORIGIN

Date: 1/31/2020

Revision: 03

Product: Poly-L-Ornithine, Powder, 5 mg

Supplier	Advanced BioMatrix, Inc.
Supplier Catalog No.	5172
Supplier Location	California, USA
Name/Grade	Poly-L-Ornithine, Powder, 5 mg
Animal Origin (including human)	
-Animal Species	Not applicable - This product is manufactured solely from synthetic materials and do not contain any raw materials produced or substances derived from animal origin.
-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	Synthetic Processing
Briefly describe Method of Manufacturing	Poly-L-Ornithine is a synthetic amino acid chain that is positively charged having one hydrobromide per unit of ornithine. The molecular weight of Poly-L-Ornithine for cell culture can vary significantly, with lower molecular weight (30,000 Da) being less viscous and higher molecular weight (greater than 300,000 Da) having more binding sites per molecule.

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

President

January 31, 2020

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