



CERTIFICATE OF MATERIAL ORIGIN

Date: 10/27/2017

Revision: 02

Product: CD274, Human, Solution

Supplier	Advanced BioMatrix, Inc.
Supplier Catalog No.	5126
Supplier Location	California, USA
Name/Grade	CD274, Human, Solution, 0.5 mg/ml
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	Recombinant and protein expression
Briefly describe Method of Manufacturing	Recombinant human CD274 extracellular domain cDNA (19-238 aa, derived from BC074984) was constructed with codon optimization and expressed with a small T7-His-TEV cleavage site Tag (29aa) fusion at its N-terminal and expressed in E. coli as inclusion bodies. The final product was refolded using our unique "temperature shift inclusion body refolding" technology and chromatographically purified.

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

President

October 27, 2017

Corporate Headquarters
P.O. Box 502403
San Diego, CA 92150-2403

(800) 883-8220 (760) 929-0755
(510) 217-3452 Fax
www.advancedbiomatrix.com

Manufacturing Facility
5930 Sea Lion Place, Ste. 100
Carlsbad, CA 92010