



# CERTIFICATE OF MATERIAL ORIGIN

Date: 10/27/2017

Revision: 02

**Product:** CDH18, Human, Solution

<b>Supplier</b>	Advanced BioMatrix, Inc.
<b>Supplier Catalog No.</b>	5090
<b>Supplier Location</b>	California, USA
<b>Name/Grade</b>	CDH18, Human, Solution, 0.5 mg/ml
<b>Animal Origin (including human)</b>	
-Animal Species	Not applicable
-Tissue Origin	Not applicable
-County of Origin	Not applicable
<b>Non-animal Source of Origin</b>	
-Country of Origin	United States
<b>Animal Origin Material Adventitious Agent Risk Reduction Steps</b>	Not applicable
<b>Method of Manufacturing</b>	Recombinant and protein expression
<b>Briefly describe Method of Manufacturing</b>	Full-length extracellular domain of human CDH18 gene (54-608 aa) was constructed with 29 N-terminal T7/His tag 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](http://www.advancedbiomatrix.com)

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