

CERTIFICATE OF MATERIAL ORIGIN

Date: 10/27/2017 Revision: 02

Product: CDH3, Human, Solution

Supplier	Advanced BioMatrix, Inc.
Supplier Catalog No.	5124
Supplier Location	California, USA
Name/Grade	CDH3, 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	Full-length extracellular domain of human CDH3 gene
Manufacturing	(108 – 645 aa) was constructed with 29 N-terminal T7/His
	tag and expressed in E. coli as inclusion bodies. The final
	product was refolded using a 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.

I Dagley

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

October 27, 2017

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