

## Certificate of Analysis

Date of Testing: 2023-01-13 18:13:06  
Date of Next Testing: 2027-01-12 18:13:06  
Product Name:  **$\alpha$ -Cyclodextrin**  
CAS Number: 10016-20-3  
Specifications & Purity: for cell culture,  $\geq 98\%$   
Lot #: A2306356  
SKU #: **C106778**  
Analysis: **159160**

Parameter	Limit Values	Result
Water by Karl Fischer	0-14.5 (%)	6.19 %
Purity(HPLC)	98-100 (%)	99.39100 %
Specific Rotation $[\alpha]_{20/D(c=1 \text{ in H}_2\text{O})}$ (anhydrous)	147-152 (°)	147.23°
Appearance (C106778)	white powder	White powder
Solubility in H <sub>2</sub> O , Colorless Clear(10 mg/ml)	pass	Pass
Infrared spectrum	Conforms to Structure	Conforms to Structure
Cell Culture Test	pass	Pass



John Su  
QA & QC Manager