

## Certificate of Analysis

Date of Testing: 2023-04-17 17:45:26  
Date of Next Testing: 2027-04-16 17:45:26  
Product Name: **γ-Cyclodextrin**  
CAS Number: 17465-86-0  
Specifications & Purity: 98%,for cell culture  
Lot #: D2308826  
SKU #: **C103967**  
**Analysis: 138126**  
Storage Temperature: Argon charged

Parameter	Limit Values	Result
Purity(HPLC)	98-100 (%)	99.29400%
Water by Karl Fischer	0-12 (%)	8.71%
Specific Rotation [α] <sub>20</sub> /D(c=1 in H <sub>2</sub> O in as anhydride)	176-180 (°)	176.01°
Appearance (C103967)	white powder	White powder
Cell Culture Test	pass	Pass
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Solubility in 1 M NH <sub>4</sub> OH , Colorless,Clear to Very Slightly Hazy,50 mg/mL	pass	Pass
Infrared spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager