



## CERTIFICATE OF ANALYSIS

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Product	X-GLUC ( X-GlcA CHA)
Product Code	BB0085
Grade	Ultra Pure
Formula	$C_{14}H_{13}BrClNO_7 \cdot C_6H_{13}N$
MW	521.8 g/mole
CAS#	114162-64-0
Lot No	

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Test Items	Specification	Results
Appearance	White to off-white crystalline powder	
Color of solution(1%, DMF/Water)	Colorless	
Turbidity(1%, DMF/Water)	$\leq 4.0$ NTU	
Water content (K. Fisher, theoretically for monohydrate:3.34% )	2.5 to 4.5%	
Specific Optical Rotation $[\alpha]^D$ (c=1 in DMF/water 1:1, 20°C)	-91.0 to 87.0	
Perchloric Acid Titration (0.1mol/L) (calculated on dry matter)	99.0 to 101.0%	
Purity (HPLC)	$\geq 99.0$ area-%	
TLC (30mg/ml in solvent system; butanol/acetic acid/water 6:3:2; UV 254nm, sulfuric acid)	Corresponds to reference material	
FT-IR Spectrum	Corresponds to reference material	

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Storage: -20°C. Keep dry. Warm to room temperature before opening