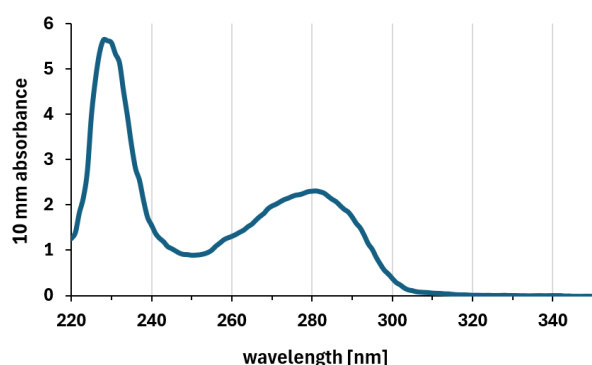


Certificate of analysis

Product number: GL-006
Product name: PA-IL (LecA) lectin produced recombinantly in *E. coli*, unconjugated
Form: Lyophilized powder
Unit size: 1 mg, 5 mg, 10 mg
LOT number: 12159

General quality test

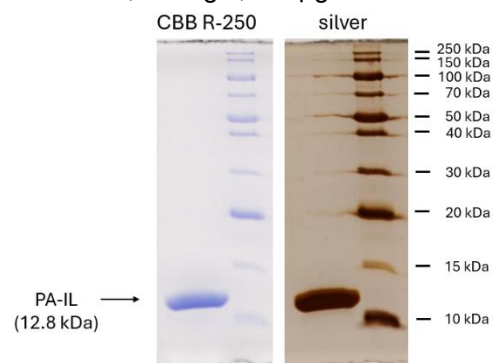
UV spectrometry, 1.05 mg/ml



$$A_{260}/A_{280} = 0.57$$

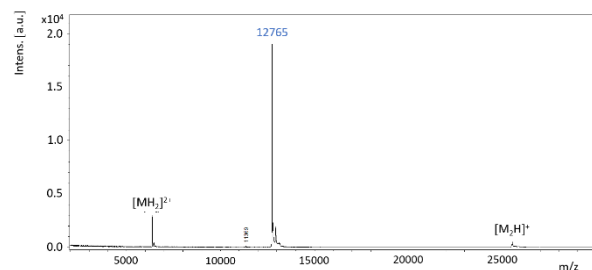
Purity

SDS-PAGE, 15% gel, 7.9 μ g loaded



Identity

Intact mass analysis (MALDI-TOF)

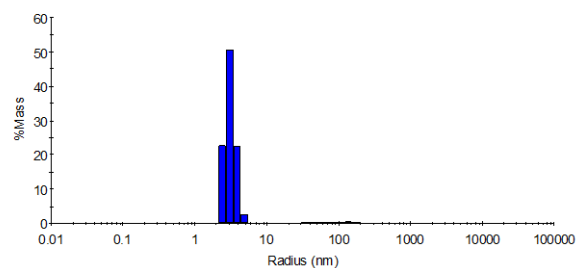


Molar mass (theoretical): 12762 Da

Molar mass (MS): 12765 Da

Homogeneity

Dynamic light scattering (DLS), 2 mg/ml, 25 °C

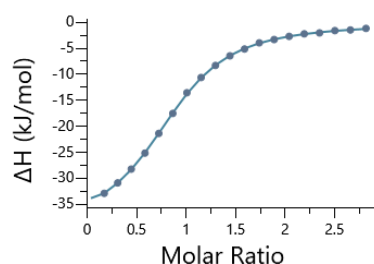
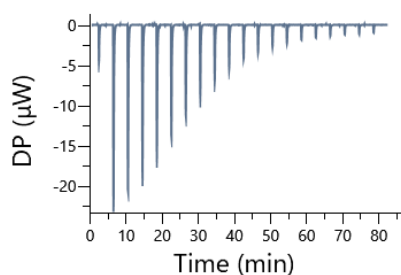


$R_h = 3.2$ nm (in 20 mM Tris, 150 mM NaCl, 3 mM $CaCl_2$, pH 7.4)

Activity

Isothermal titration calorimetry (ITC), 25 °C

PA-IL, 300 μ M (cell) + α MeGal, 4 mM (syringe), in 20 mM Tris, 150 mM NaCl, 3 mM $CaCl_2$, pH 7.4



$N = 0.86$

$K_d = 41.2$ μ M

$\Delta H = -39.4$ kJ/mol

$\Delta G = -25.1$ kJ/mol

$-T\Delta S = 14.4$ kJ/mol

(apparent thermodynamic values,
no blank subtraction)