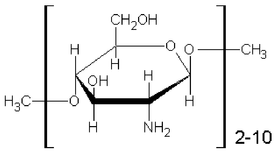
Procedure for molecular weight 、degree of polymerization(DP) and distribution of Amino oligosaccharides

Amino oligosaccharin is a new plant induced resistance agent, it could rearched the role of preventing and treating illnesses.

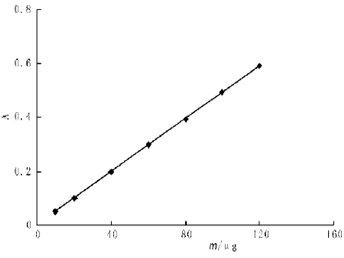


Amino Oligosaccharides

Section A

UV spectrophotometer procedure for determing the concentration of the amino oligosaccharins

UV spectrophotometer Condition:
Model:UV-3300PC
Temperature :Room temperature
Detector Wavelength :525nm
Concentration of oligosaccharins:



$$(g/100g) = K * \frac{C * 150 * 100}{30 * 1000}$$

k--- Empirical coefficient,K=3
C---the concetration(c) of the solution diluted from the standard curve(μg/mL)
150---the total volume of the obtained solution waiting for test(mL)
30---the dry weight of the sample waiting for test (mg)
100-- change into percentage
1000---change the unit mg into g.

Section B:

HPLC procedure for DP and distribution of amino oligosaccharides

HPLC Condition:

Column: TSK-GEL G4000PW$_{XL}$,7.8×300mm

Guard Column : TSK-GEL PW$_{XL}$ 6.0×40mm

Column Heater: Set at 32 ℃,

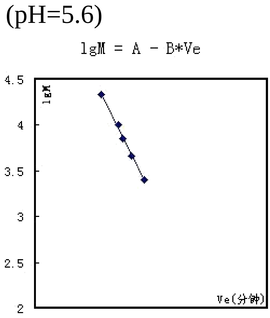
Detector: Refractive Index Detector

Mobile Phase: HAC-NH_4AC (pH=5.6)

Analytical Mode: Isocratic

Flow Rate: 0.43 mL/min

Injection Size: 20 μL



n=M_w/180
D=M_w/M_n

n---DP,
D---distribution of amino oligosaccharides
M_w---Weight average molecular weight,
M_n---Number average molecular weight
180---Molecular weight of glucosamine