

### Three detector calibration

dn/dc polypeptide 0.175

dn/dc sugars 0.134

$$MW = k \cdot (LS) \cdot (UV) / (A \cdot (RI)^2)$$

where k is a system constant (from calibration)

A=extinction coefficient expressed in terms of weight concentration [mL/(mg\*cm-1)]

see: Hayashi, Matsui and Takagi  
Methods in Enzymology ((1989) Vol 172, 514-528

Error UV 0.005  
Error LS 0.005  
Error RI 0.005

#### Three det. Approach

protein	(LS)*(UV)/(A*(RI^2))		computed	error
	ratio	MW [kDa]		
OVA(1)	239.7	43	47	9%
BAM	1074.9	220	211	4%
CA	164.7	29	32	12%
AD	807.030	149	159	6%
BSA (1)	341.2	66	67	2%
AVERAGE				7%

Column: S200#5

"three det" calibration constant= 1.96E-01

Based on analyses of standard proteins  
run in the same buffer  
from Hayashi, Matsui and Takagi

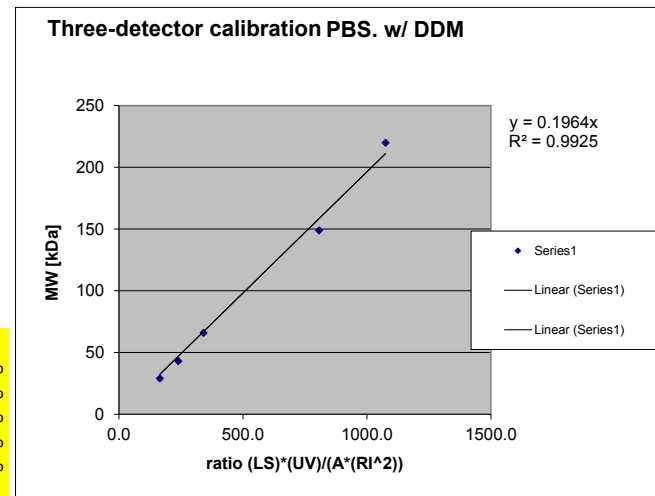


Fig S1