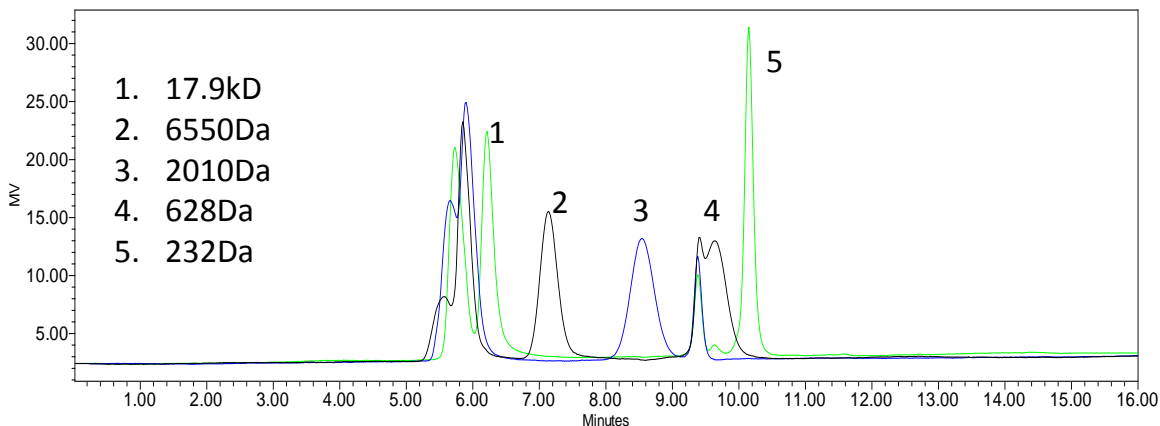




PEG Separation on Zenix™ SEC



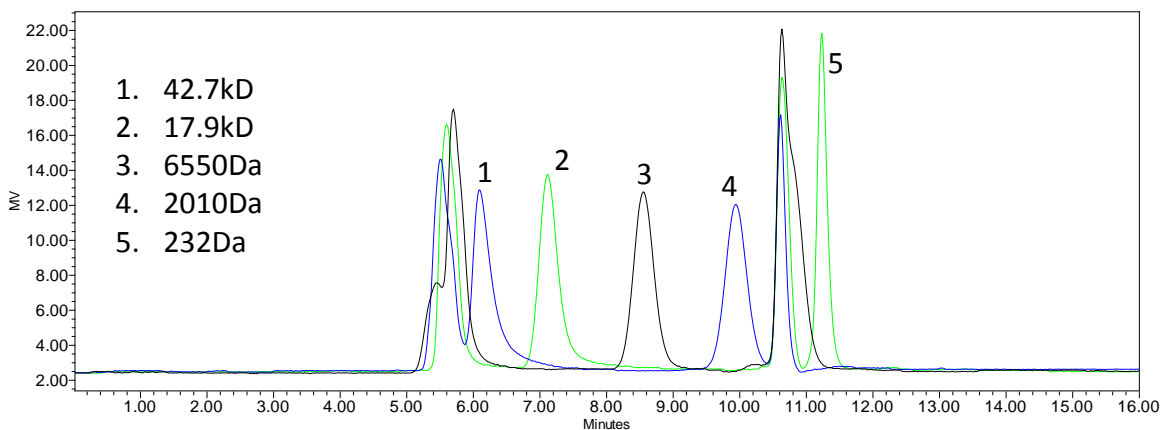
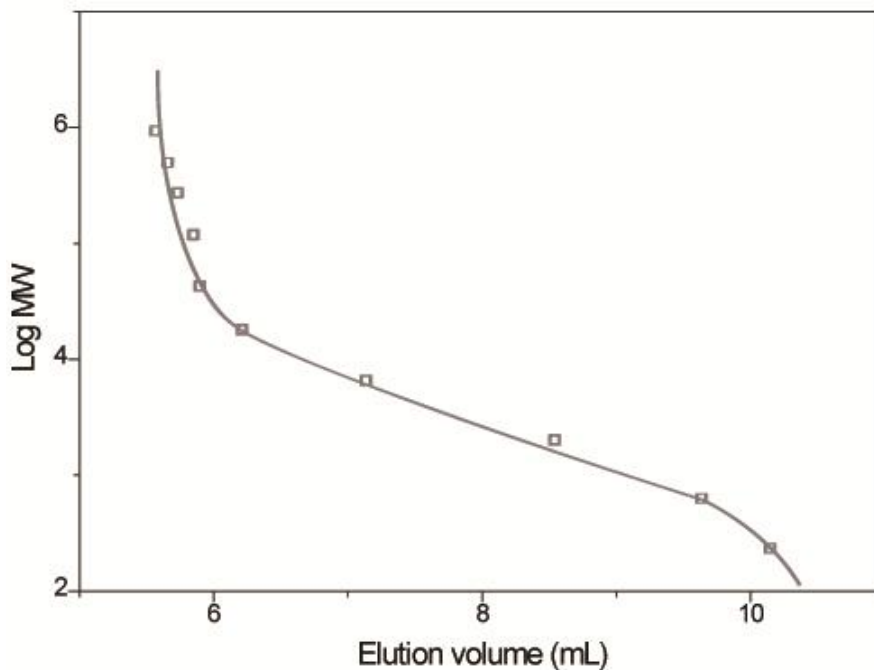
Columns: **Zenix SEC-100 (3 μ m, 7.8x300 mm)**
Mobile Phase: 150 mM sodium phosphate buffer, pH 7.0
Flow Rate: 1 mL/min;
Temperature: Ambient
Detection: RI (30°C)
Injection Volume: 20 μ l
Samples: PEG1:932 kD, 118 kD, 6.55 kD, 0.628 kD;
PEG2:496 kD, 42.7 kD, 2.01 kD;
PEG3:271 kD, 17.9 kD, 0.232 kD

PEG MW vs. Retention time (ml) on Zenix SEC-100 (7.8x300mm)

NO	Molecular weight	Log MW	Elution volume (mL)
1	932000	5.969416	5.568
2	496000	5.695482	5.659
3	271000	5.432969	5.732
4	118000	5.071882	5.851
5	42700	4.630428	5.897
6	17900	4.252853	6.212
7	6550	3.816241	7.136
8	2010	3.303196	8.543
9	628	2.79796	9.637
10	232	2.365488	10.149



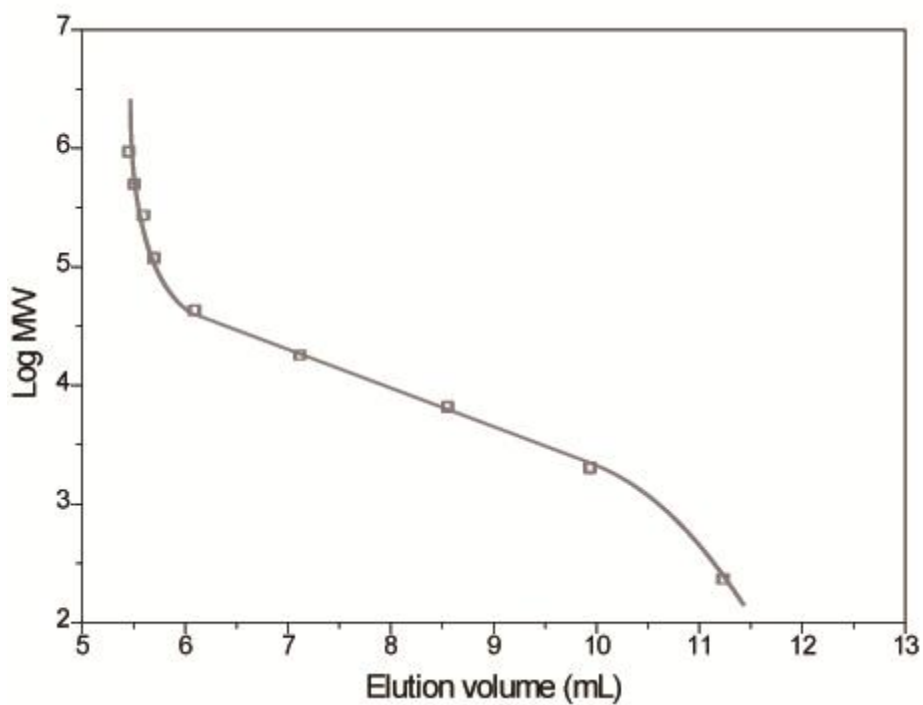
PEG MW Calibration Curve on Zenix SEC-100 7.8x300mm

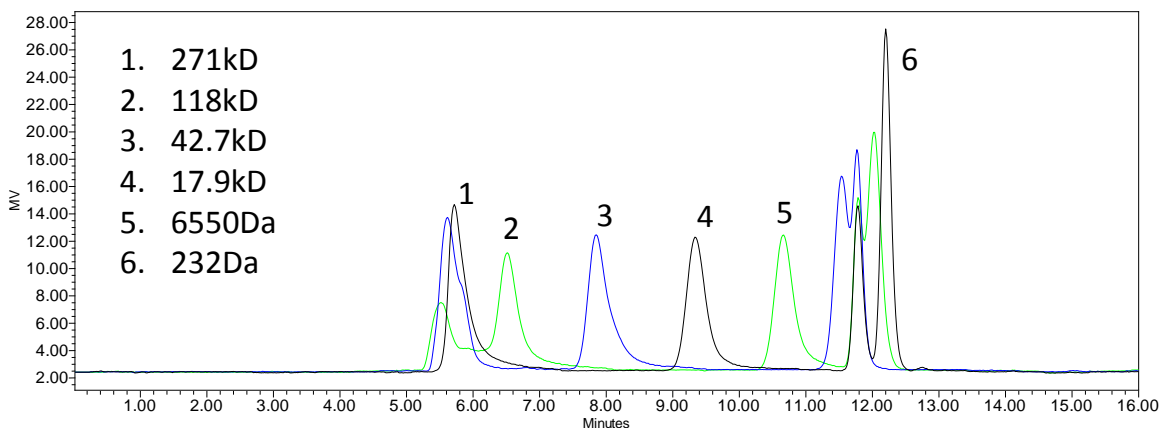


Columns: **Zenix SEC-150** (3 μ m, 7.8x300 mm)
Mobile Phase: 150 mM sodium phosphate buffer, pH 7.0
Flow Rate: 1 mL/min;
Temperature: Ambient
Detection: RI (30°C)
Injection Volume: 20 μ l
Samples: PEG1:932 kD, 118 kD, 6.55 kD, 0.628 kD;
PEG2:496 kD, 42.7 kD, 2.01 kD;
PEG3:271 kD, 17.9 kD, 0.232 kD

**PEG MW vs. Retention time (ml) on Zenix SEC-150 (7.8x300mm)**

Molecular weight	Log MW	Elution volume (ml)
932000	5.969416	5.454
496000	5.695482	5.508
271000	5.432969	5.598
118000	5.071882	5.699
42700	4.630428	6.093
17900	4.252853	7.115
6550	3.816241	8.553
2010	3.303196	9.94
628	2.79796	-
232	2.365488	11.231

PEG MW Calibration Curve on Zenix SEC-150 7.8x300mm



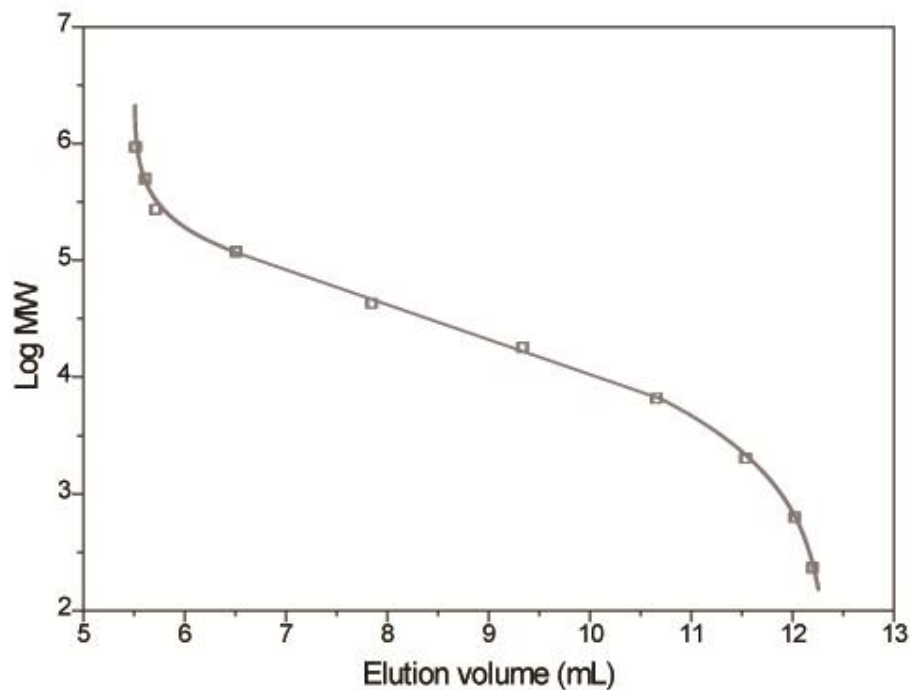
Columns: **Zenix SEC-300** (3 μ m, 7.8x300 mm)
 Mobile Phase: 150 mM sodium phosphate buffer, pH 7.0
 Flow Rate: 1 mL/min;
 Temperature: Ambient
 Detection: RI (30°C)
 Injection Volume: 20 μ l
 Samples: PEG1:932 kD, 118 kD, 6.55 kD, 0.628 kD;
 PEG2:496 kD, 42.7 kD, 2.01 kD;
 PEG3:271 kD, 17.9 kD, 0.232 kD

PEG MW vs. Retention time (ml) on Zenix SEC-300 (7.8x300mm)

Molecular weight	Log MW	Elution volume (mL)
932000	5.969416	5.519
496000	5.695482	5.614
271000	5.432969	5.718
118000	5.071882	6.512
42700	4.630428	7.850
17900	4.252853	9.339
6550	3.816241	10.660
2010	3.303196	11.540
628	2.79796	12.025
232	2.365488	12.201



PEG MW Calibration Curve on Zenix SEC-300 7.8x300mm



PEG MW linear range on Zenix 100, 150 and 300 Å

MW	Zenix 100 7830	Zenix 150 7830	Zenix 300 7830
232			
628			
2010			
6550	R2 = 0.9849	R2 = 0.9984	
17900			
42700			R2 = 0.9931
118000			
271000			
496000			
932000			

Keyword: Size exclusion, water soluble polymer, PEG, Zenix