

Supplemental Information

Biophysical Characterization of Adeno-Associated Virus Vectors Using Ion-Exchange Chromatography Coupled to Light Scattering Detectors

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Supplementary Table S1: Chromatographic separation method using an AEX column and salt gradient with a flow rate of 0.5 mL/min (B = binding buffer, 20 mM Tris, pH 8.5; E = elution buffer, 20 mM Tris + 120 mM MgCl₂, pH 8.5).

Time	Salt gradient	
	%B	%E
0	100	0
2	100	0
27	65	35
28	0	100
32	0	100
32.1	100	0
45	100	0

Supplementary Table S2: Chromatographic separation methods for the determination of the robustness using an AEX column and salt gradients A-D and a flow rate of 0.5 mL/min (B = binding buffer, 20 mM Tris, pH 8.5; E = elution buffer, 20 mM Tris + 120 mM MgCl₂, pH 8.5).

Time	Gradient A		Gradient B		Gradient C		Gradient D	
	%B	%E	%B	%E	%B	%E	%B	%E
0	100	0	100	0	100	0	100	0
2	100	0	100	0	100	0	100	0
27	65	35	55	45	45	55	35	65
28	0	100	0	100	0	100	0	100
32	0	100	0	100	0	100	0	100
32.1	100	0	100	0	100	0	100	0
45	100	0	100	0	100	0	100	0

Supplementary Table S3: Chromatographic separation methods using an AEX column and salt gradient (B = binding buffer, 20 mM Tris, pH 8.5; E = elution buffer, 20 mM Tris + 120 mM MgCl₂, pH 8.5) or pH gradient (B = binding buffer, 20 mM Tris + 10 mM MgCl₂ pH 7; E = elution buffer, 20 mM Tris + 10 mM MgCl₂, pH 10) with a flow rate of 0.5 mL/min.

Time	Salt gradient		Time	pH gradient	
	%B	%E		%B	%E
0	100	0	0	100	0
2	100	0	2	100	0
27	65	35	32	0	100
28	0	100	36	0	100
32	0	100	36.1	100	0
32.1	100	0	49	100	0
45	100	0			