

Supplementary Table S-7. Calibration conditions and results

No	Analyte	Calibration equation y=	R ²	Average Precision (%)	Calibration Range (mM)	Background electrolyte	Injection	L _{tot} (cm)*	L _{eff} (cm)*
1	K ⁺	0.3335x	0.9964	<10.3	0.0058-0.3700	500 mM CH ₃ COOH	10s×20kPa	30	23.5
2	Ca ²⁺	0.8642x	0.9913	<9.6	0.0059-0.3818				
3	Na ⁺	0.6226x	0.9953	<6.5	0.0039-0.2500				
4	NH ₄ ⁺	0.3363x	0.9913	<4.5	0.0133-0.3127				
5	Diethylamine	0.7199x	0.9984	<2.2	0.0151-0.9680				
6	Triethylamine	0.9175x	0.9967	<3.3	0.0112-0.7165				
7	BSA*	18.202x	0.9925	<11.1	0.0005-0.0341				
8	Formic acid	0.1212x + 0.0021	0.9922	<11.6	0.0078-0.2500	150 mM AMP**	10s×20kPa	35	28.5
9	Acetic acid	0.2909x + 0.0023	0.9857	<10.3	0.0078-0.2500				
10	Methylphosphonic acid	0.2465x	0.9935	<3.8	0.0400-0.2000	10 mM MES*** / L- His****	5s×20kPa	35	28.5
11	Ethylphosphonic acid	0.0867x + 0.0022	0.9925	<8.0	0.0400-0.1000				
12	Propylphosphonic acid	0.0857x + 0.0028	0.9934	<8.8	0.0400-0.1000				
13	Ethyl methylphosphonate	0.0725x + 0.0011	0.9956	<12.6	0.0400-0.1000				
14	Pinacoyl methylphosphonate	0.0587x + 0.0007	0.9809	<6.2	0.0400-0.1000				

* BSA – Bovine serum albumin

- ** AMP - 2-Amino-2-methyl-1-propanol
- *** MES - 2-(N-morpholino)ethanesulfonic acid
- **** L-His - L-histidine