Electronic Supplementary Material (ESI) for Analyst.
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Supporting information

Illustration of surface-induced dissociation (SID)-ion mobility-SID mass spectrometry: homo and hetero model protein complexes.

Royston S. Quintyn,[†] Sophie R. Harvey,[†*] Vicki H. Wysocki[†]

[†] Department of Chemistry and Biochemistry, Ohio State University, 484 W. 12th Ave., Columbus, Ohio 43210

* School of Chemistry, Manchester Institute of Biotechnology, University of Manchester, Manchester, M1 7DN, UK

	Monomer	Dimer	Trimer	Tetramer
Molecular weight (Da)	13271	26542	39813	53084
+3	4425	8848	13272	17696
+4	3319	6637	9954	13272
+5	2655	5309	7964	10618
+6	2213	4425	6637	8848
+7	1897	3793	5689	7584
+8	1660	3319	4978	6637
+9	1476	2950	4425	5899
+10	1328	2655	3982	5309
+11	1207	2414	3620	4827

Table S1: Molecular weights and predicted *m/z* values for intact streptavidin and the corresponding subcomplexes.

	Monomer (nm^2)	Dimer (nm^2)	Trimer (nm^2)	Tetramer (nm^2)
+3	13.29	----	----	----
+4	13.18	20.90	----	----
+5	13.25	20.93	27.94	----
+6	17.10	20.97	27.48	----
+7	----	21.02	27.01	----
+8	----	----	26.75	----
+9	----	----	----	32.99
+10	----	----	----	33.44
+11	----	----	----	34.17

Table S2: Experimentally determined CCS for streptavidin following SID and CID, the tetramer CCS was determined from the MS spectrum.

	α Monomer	β Monomer	β-β Dimer	β-β-α Trimer	α-β-β-α Tetramer
Molecular weight (Da)	28724	42983	85966	114690	143414
+3	9576	14329	28656	38231	47806
+4	7182	10747	21493	28674	35855
+5	5746	8598	17194	22939	28684
+6	4788	7165	14329	19116	23903
+7	4104	6141	12282	16385	20489
+8	3592	5374	10745	14337	17928
+9	3193	4777	9553	12744	15936
+10	2873	4299	8598	11470	14342
+11	2612	3909	7816	10427	13039
+12	2394	3583	7165	9559	11952
+13	2211	3307	6614	8823	11033
+14	2053	3071	6141	8193	10245
+15	1916	2867	5732	7647	9562
+16	1796	2687	5374	7169	8964
+17	1691	2529	5058	6747	8437
+18	1597	2389	4777	6373	7968
+19	1513	2263	4526	6037	7549

Table S3: Molecular weights and predicted *m/z* values for intact tryptophan synthase and the corresponding subcomplexes.

	Monomer	Dimer	Trimer	Tetramer	Pentamer
Molecular weight (Da)	23,000	46,000	69,000	92,000	115,000
+3	7668	15334	23001	30668	38334
+4	5751	11501	17251	23001	28751
+5	4601	9201	13801	18401	23001
+6	3834	7668	11501	15334	19168
+7	3287	6572	9858	13144	16430
+8	2876	5751	8626	11501	14376
+9	2557	5112	7668	10223	12779
+10	2301	4601	6901	9201	11501
+11	2092	4183	6274	8365	10456
+12	1918	3834	5751	7668	9584
+13	1770	3539	5309	7078	8847
+14	1644	3287	4930	6572	8215
+15	1534	3068	4601	*6134*	7668
+16	1439	2876	4314	5751	7189
+17	1354	2707	4060	5413	6766
+18	1279	2557	3834	5112	6390

Table S4: Molecular weights and predicted *m/z* values for intact CRP and the corresponding subcomplexes.