

Collision Cross Sections (\AA^2) obtained on the MoQToF

Cytochrome c from aqueous solution

<i>Charge</i>	<i>Monomer</i>	<i>Dimer</i>	<i>Trimer</i>
5	1217		
6	1243		
7	1546		
8	1865		
9	2066		
10	2228		
11	2255	2586	
12	2407		
13		3248	
14			
15		3389	
16			3812
17		3953	4014
18			
19		4157	4430

Calmodulin

<i>Charge</i>	<i>Apo (0 Ca)</i>	<i>1 Ca</i>	<i>2 Ca</i>	<i>3 Ca</i>
7	1526 1750	1575 1805	1390 1786	1371
8	1655 2068	1762 2088	1882	
9	1660 2022	1851 2030		
10	1963	1912		
11	2434	2285		
12	2895	2830		
13	2999	2998		
14	3093	3072		
15	3270	3254		
16	3333			

Hemoglobin Multimers

<i>Charge</i>	$\alpha^*\beta$ Dimer	$\alpha^*\beta^*$ Dimer	$(\alpha^*\beta^*)_2$ Tetramer
10	2225	2174	
11	2249	2355	
12	2469	2484	
13			3051
14			3215
15			3408
16			3460
17			3649

Hemoglobin Monomer Chains

<i>Charge</i>	<i>Holo-α</i>	<i>Apo-α</i>	<i>Apo-β (native)</i>	<i>Apo-β (denatured)</i>
6	1115			
7	1420	1381		1421
8	1525	1515	1461	1532
9	1608	1625	1626	1679
10		1700	1733	1864
11		1863	1871	1718
12		1577	1734	2068
13		1543	1899	1979
14		2441	1859	2267
15		2590	2080	2398
16		2614	2541	2595
17		2772	2189	2679
18		3200		3057
19		3227		3147
20		3430		
21		3413		
22		3419		

- All values are in units of Å^2 ($1 \times 10^{-16} \text{ cm}^2$).
- Values were obtained on the MoQToF at a range of drift voltages from 60-10V at a pressure of ~ 3.2 Torr and ~ 300 K temperature.