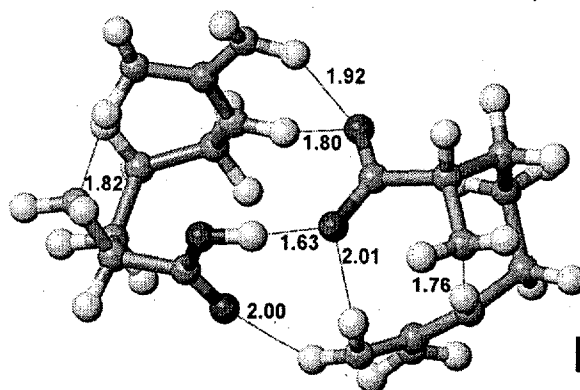
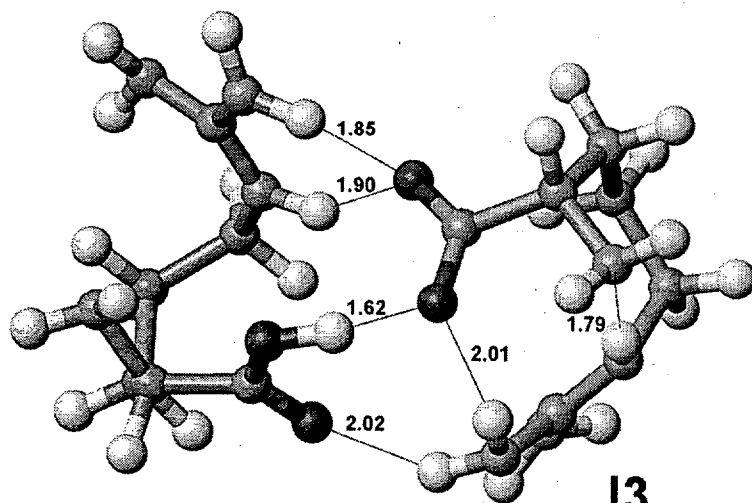


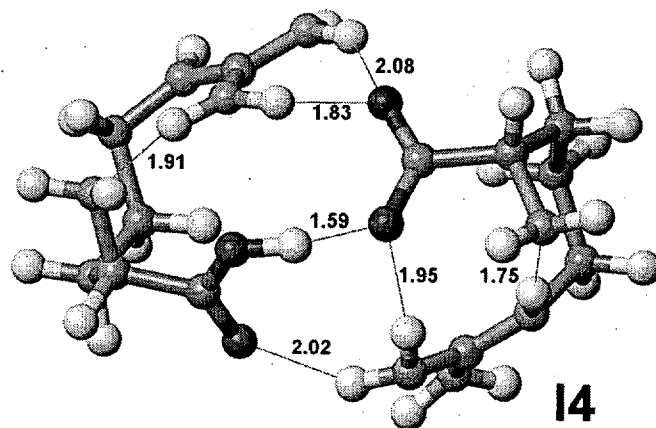
**I1**



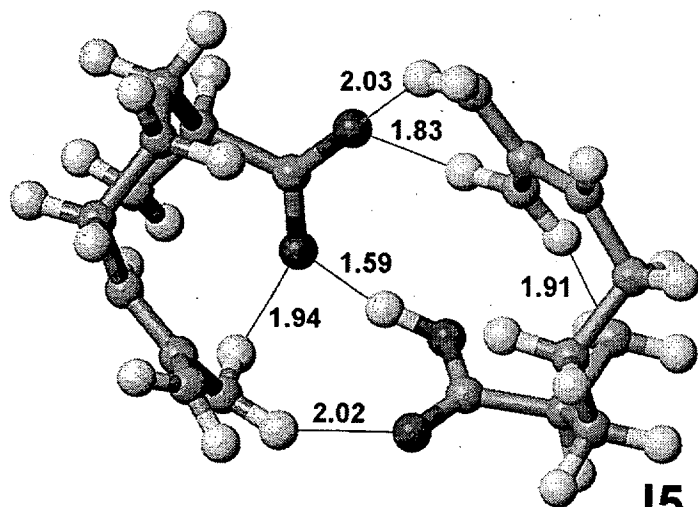
**I2**



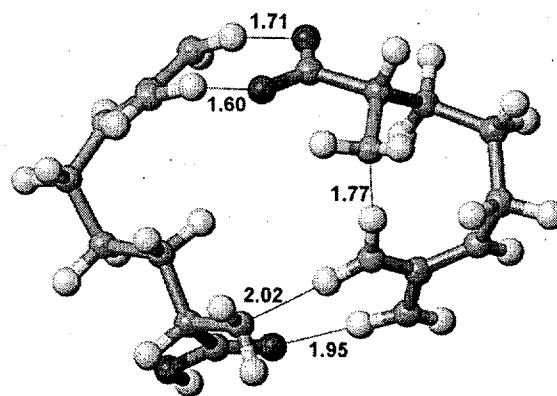
**I3**



**I4**

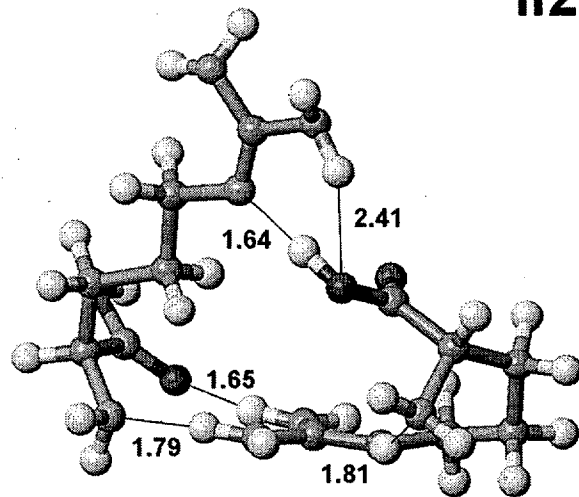
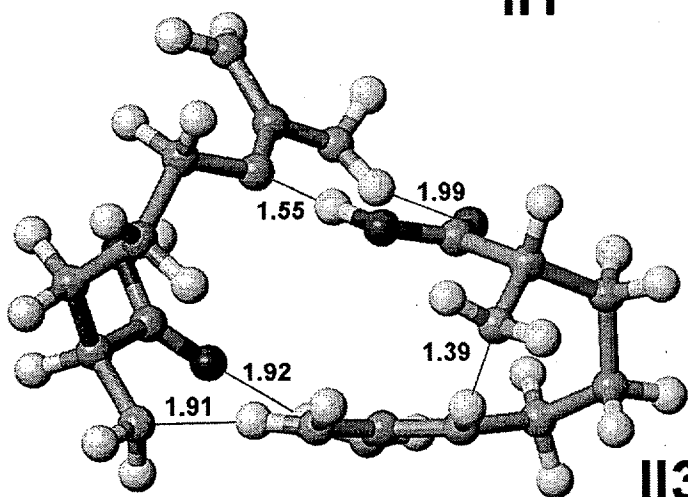
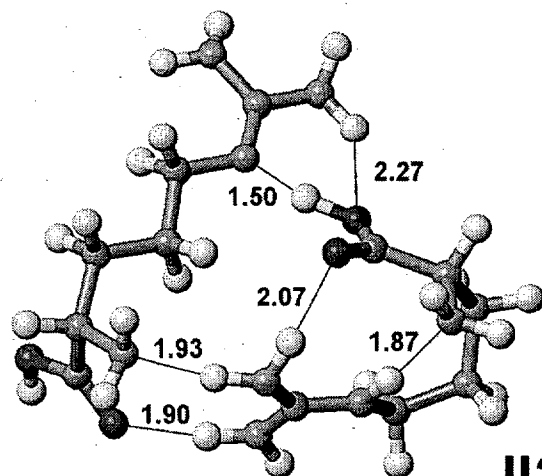
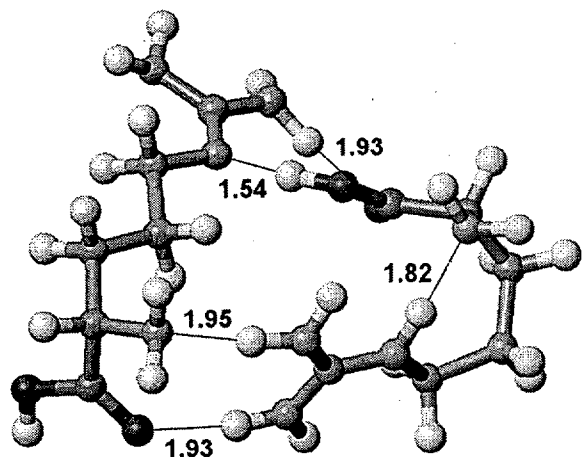
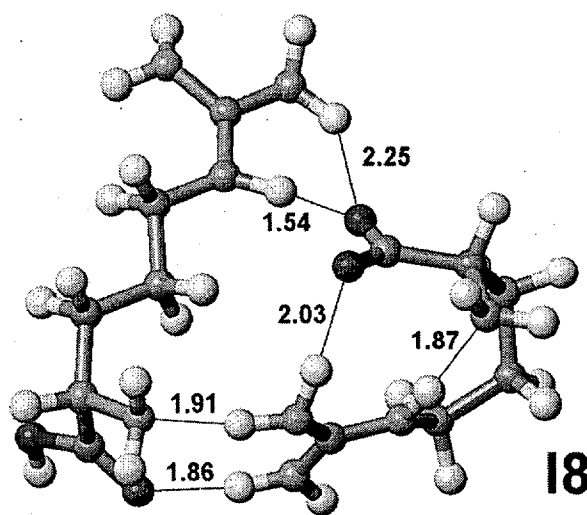
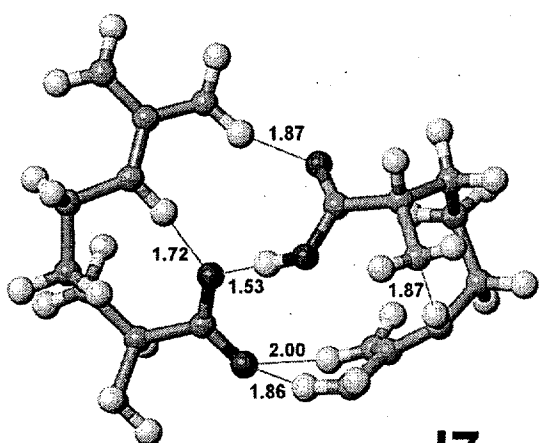


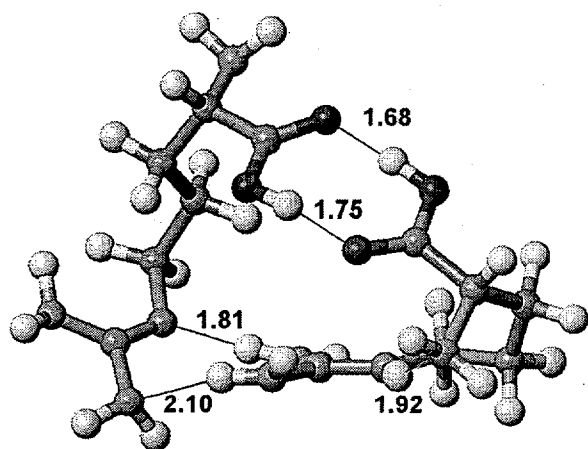
**I5**



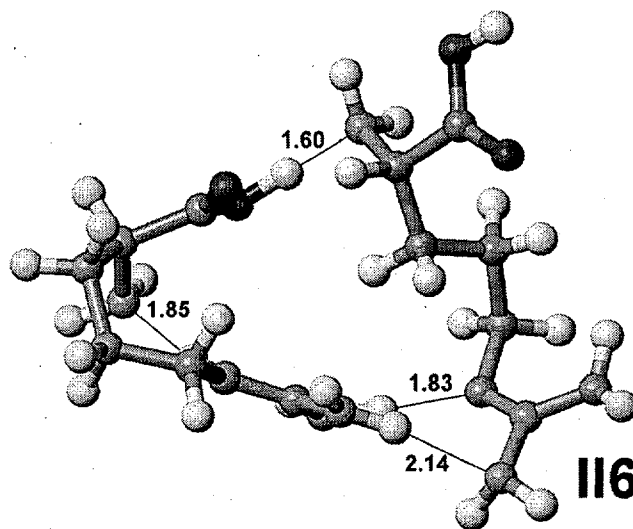
**I6**

Figure 1S

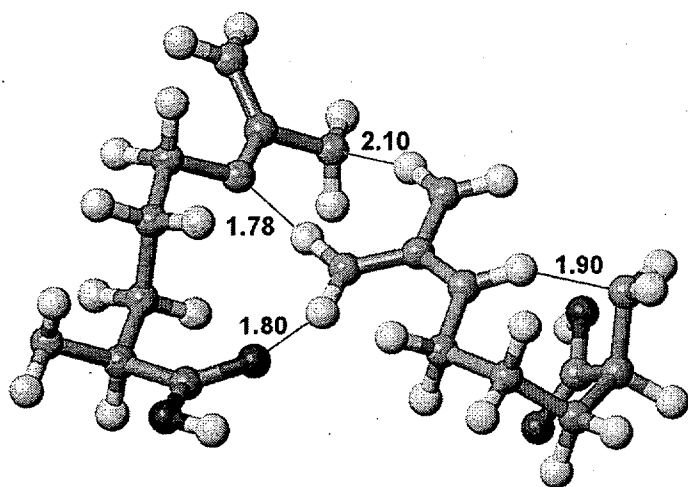




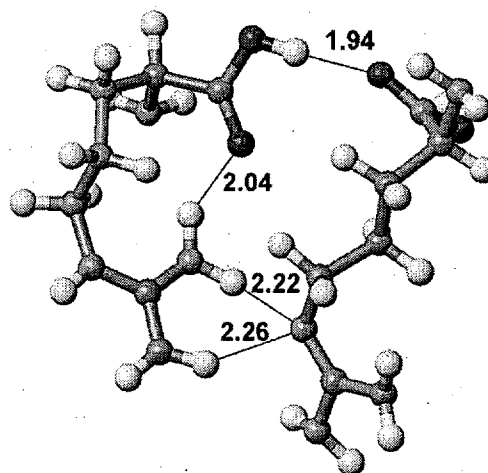
**II5**



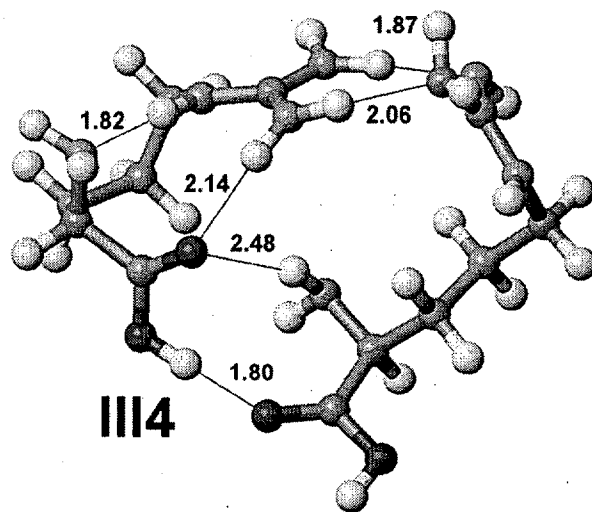
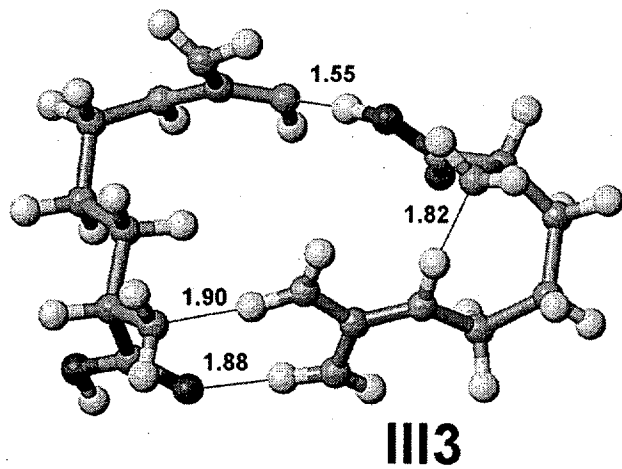
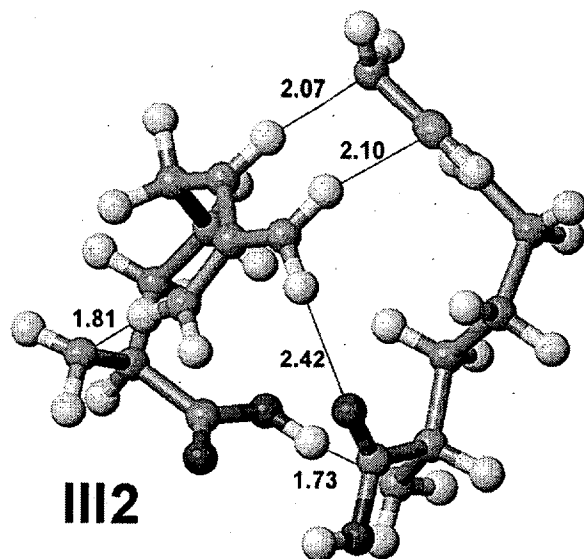
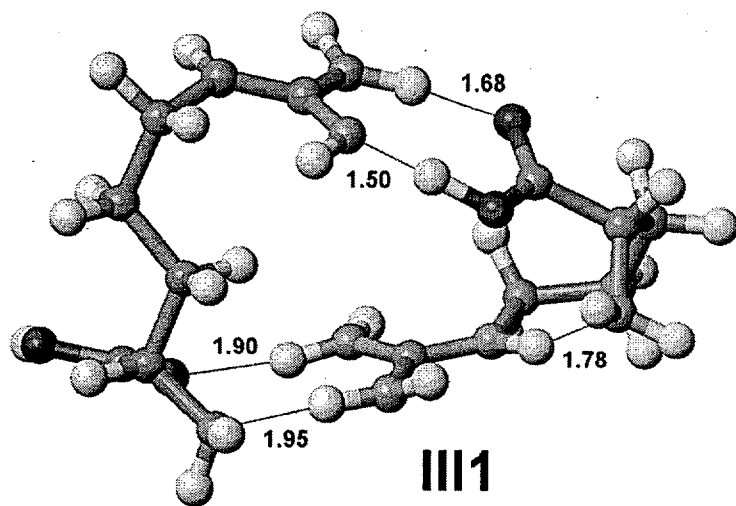
**II6**



**II7**



**II8**



**Supplementary Table 1.** The torsional bond angles measured along the peptide backbone for the conformers of bradykinin.

IV	1		2		3		4		5		6		7	
	$\psi$	$\phi$	$\psi$	$\phi$	$\psi$	$\phi$	$\psi$	$\phi$	$\psi$	$\phi$	$\psi$	$\phi$	$\psi$	$\phi$
Arg <sup>1</sup>	158		153		-8		174		173		153		173	
Pro <sup>2</sup>	164	-75	164	-78	-74	-70	144	-70	144	-69	166	-70	144	-69
Pro <sup>3</sup>	76	-79	49	-85	92	-94	54	-94	47	-92	93	-94	47	-92
Gly <sup>4</sup>	83	-78	139	-81	169	84	-80	-85	-75	87	146	-85	-75	87
Phe <sup>5</sup>	18	74	-45	-77	171	-77	170	-77	173	-73	39	-77	173	-73
Ser <sup>6</sup>	154	-170	157	-161	-79	-172	169	-172	168	-173	159	-172	168	-173
Pro <sup>7</sup>	-47	-82	-30	-83	55	-70	91	-70	91	-71	-29	-70	91	-71
Phe <sup>8</sup>	-177	-87	178	-86	144	80	-74	80	-76	80	-177	80	-76	80
Arg <sup>9</sup>		53		58		-152		-153		-153		57		-153

V	1		2		3		VII		2		3	
	$\psi$	$\phi$	$\psi$	$\phi$	$\psi$	$\phi$	$\psi$	$\phi$	$\psi$	$\phi$	$\psi$	$\phi$
Arg <sup>1</sup>	154		90		90		141		73		84	
Pro <sup>2</sup>	165	-74	155	-74	157	-75	167	-75	158	-69	-36	-56
Pro <sup>3</sup>	46	-81	33	-84	35	-85	55	-81	36	-92	-24	-62
Gly <sup>4</sup>	152	-78	117	-74	115	-76	114	-70	100	87	-17	-72
Phe <sup>5</sup>	-54	76	38	72	38	72	37	76	44	-73	28	-97
Ser <sup>6</sup>	164	-172	165	84	164	82	164	80	167	-173	162	-72
Pro <sup>7</sup>	-40	-78	2	-88	-3	-87	-5	-82	-10	-71	-36	-71
Phe <sup>8</sup>	-176	-80	180	-78	164	-78	101	-74	-158	80	142	-77
Arg <sup>9</sup>		67		72		73		70		-153		-111