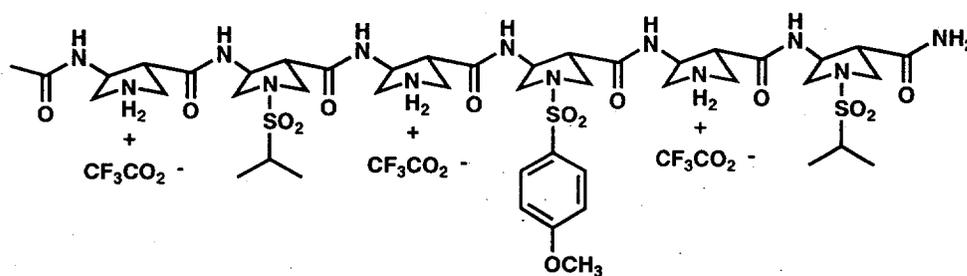
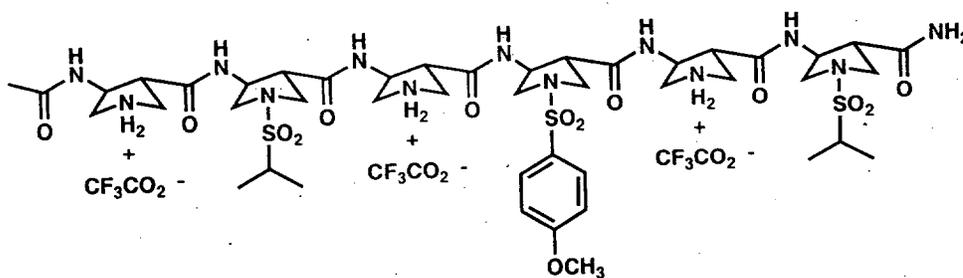


Inter-residue NOEs of hexamer in 9:1 H ₂ O:D ₂ O (100 mM Acetic Acid Buffer, pH 3.8, 4 °C)				
Residue	H-atom	Residue	H-atom	NOE
1	H α	2	HN	strong
1	H β	2	HN	weak-medium
2	H α	3	HN	strong
2	H β	3	HN	medium
2	H β	4	HN	medium
2	H β	4	H α	strong
2	H β	5	HN	weak
3	H α	4	HN	strong
3	H β	4	HN	weak
3	H β	5	H α	weak-medium
3	H β	6	HN	weak
4	H α	5	HN	strong
4	H β	5	HN	strong
4	H β	6	HN	strong
4	H β	6	H α	weak
5	H α	6	HN	strong
5	H β	6	HN	medium



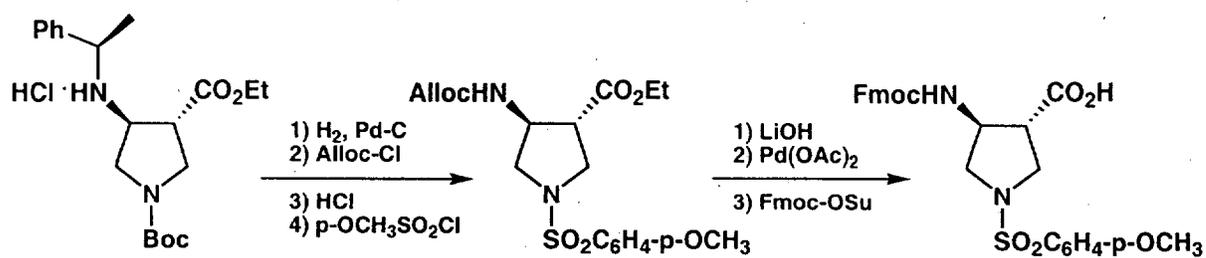
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Inter-residue NOEs of hexamer in Methanol (4 °C)				
Residue	H-atom	Residue	H-atom	NOE
1	H α	2	HN	strong
1	H β	2	HN	weak-medium
2	H α	3	HN	strong
2	H β	3	HN	medium
2	H β	4	HN	medium
2	H β	4	H α	strong
3	H α	4	HN	strong
3	H β	4	HN	weak
3	H β	5	H α	medium
4	H α	5	HN	strong
4	H β	5	HN	strong
4	H β	6	HN	strong
4	H β	6	H α	overlap
5	H α	6	HN	strong
5	H β	6	HN	medium



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**Summary of Fmoc-S-APC residue synthesis from a known
(ref. 3d) precursor**



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SUPPORTING INFORMATION FIGURE CAPTIONS

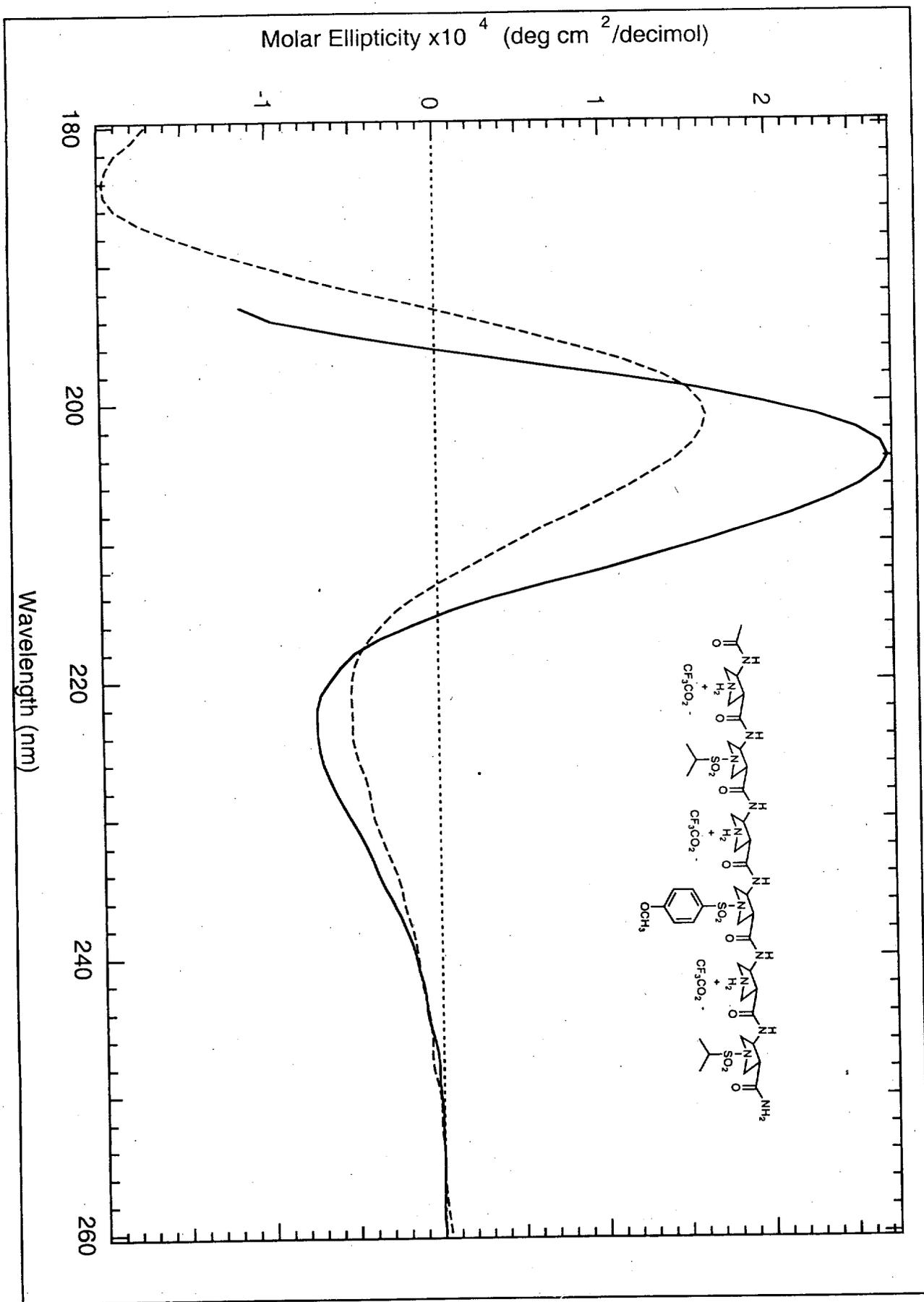
Figure 1. Circular dichroism data for hexa- β -peptide **1** (0.1 mM) at 25°C in H₂O (dashed) and CH₃OH (solid). Data were obtained on an Aviv instrument with 1 mm pathlength cells. The data are normalized for β -peptide concentration and number of residues (i.e., the vertical axis is mean residue ellipticity).

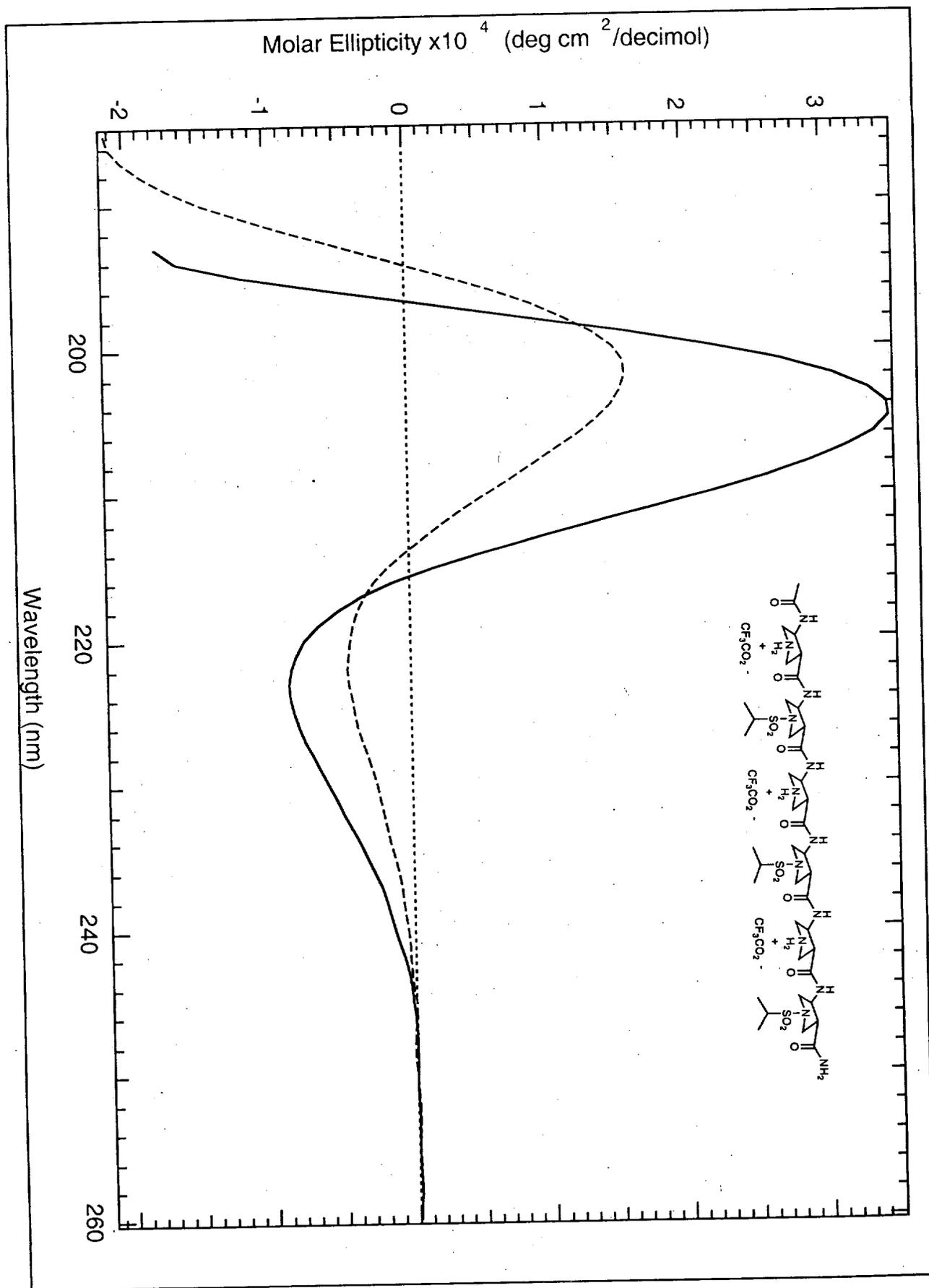
Figure 2. Circular dichroism data for hexa- β -peptide **2** (0.1 mM) at 25°C in H₂O (dashed) and CH₃OH (solid). Conditions as described in Figure 1.

Figure 3. Circular dichroism data for hexa- β -peptide **3** (0.1 mM) at 25°C in H₂O (dashed) and CH₃OH (solid). Conditions as described in Figure 1.

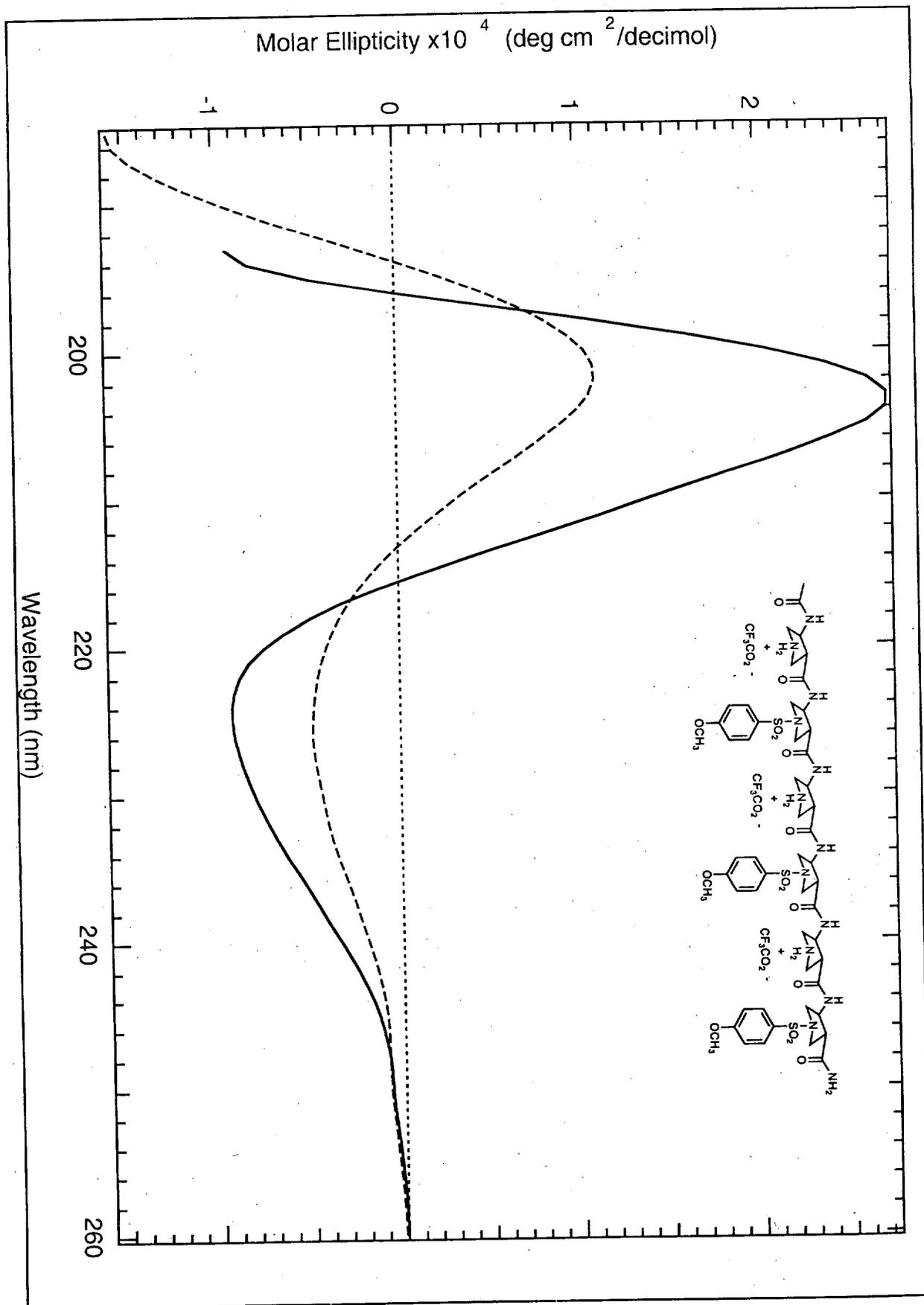
Figure 4. Circular dichroism data for hexa- β -peptide **4** (0.1 mM) at 25°C in H₂O (dashed) and CH₃OH (solid). Conditions as described in Figure 1.

Supporting Figure 1

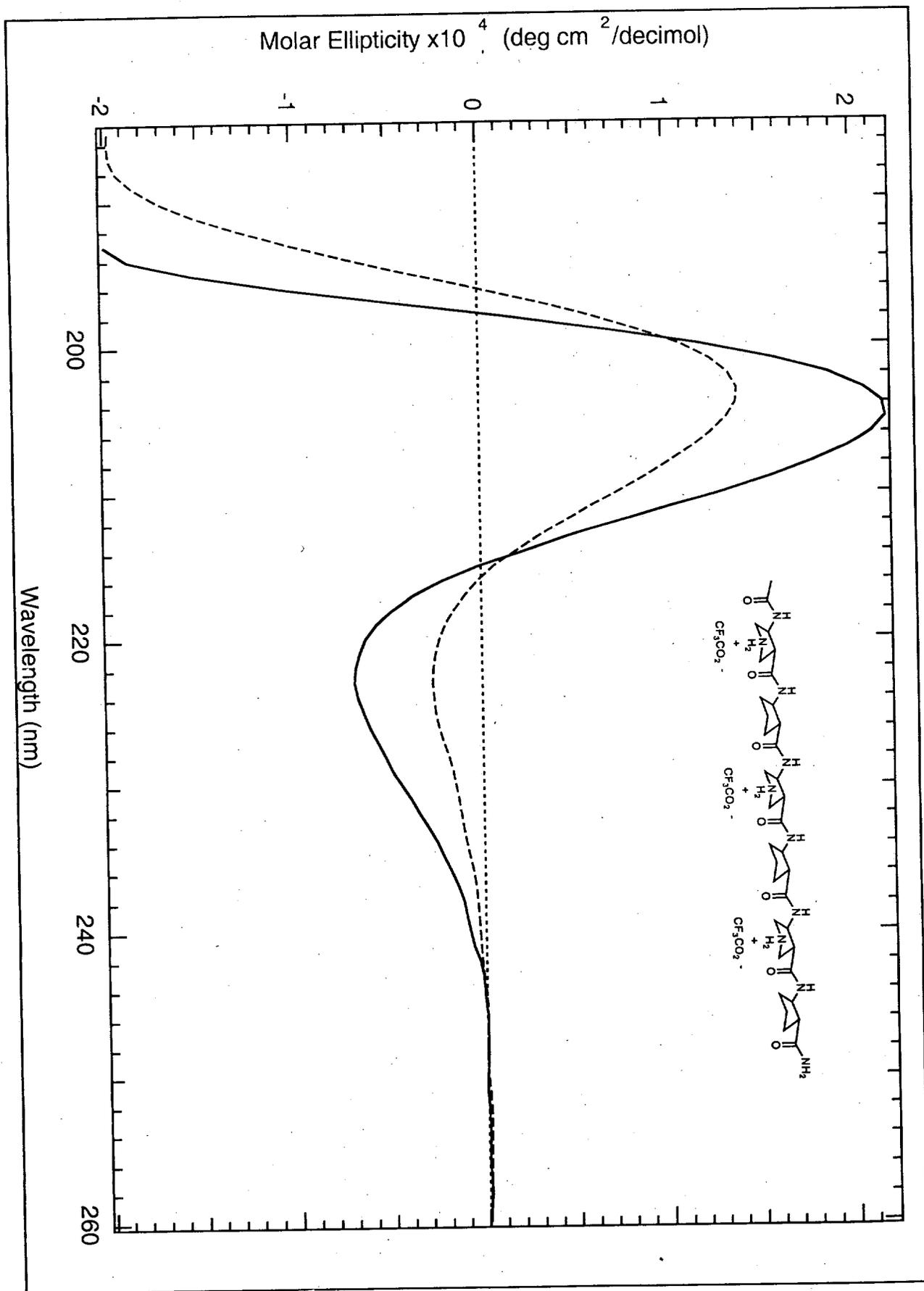




Supporting Figure 2



Supporting Figure 3



Supporting Figure 4