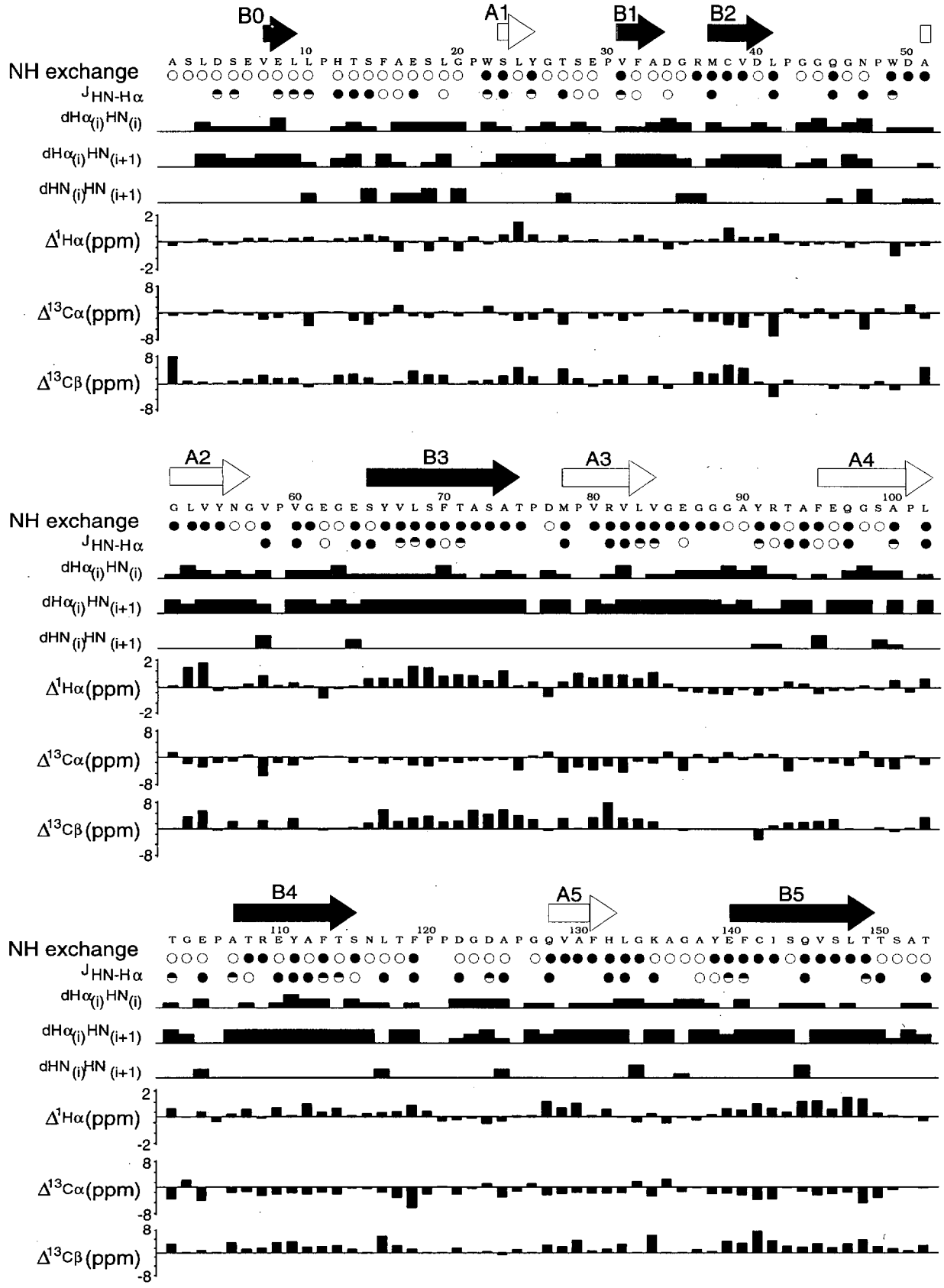
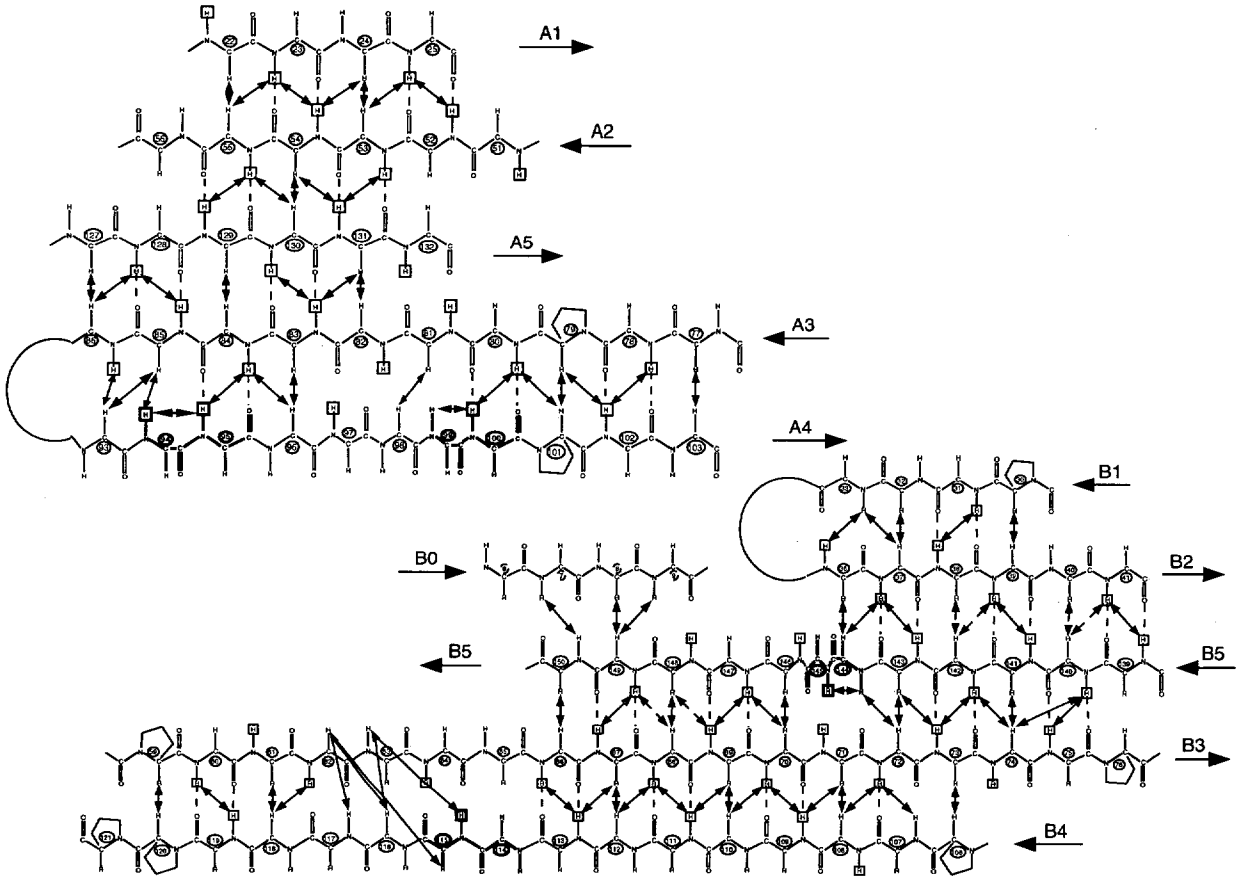
SUPPORTING INFORMATION

FIGURE S1: Summary of amide hydrogen exchange rates, $^{3}J_{HN\text{-}H\alpha}$ coupling constants, intra-residue $^{1}H_{\alpha i}$-$^{1}H^{N}_{i}$ NOEs, sequential $^{1}H_{\alpha i}$-$^{1}H^{N}_{i+1}$ NOEs, sequential $^{1}H^{N}_{i}$-$^{1}H^{N}_{i+1}$ NOEs, and $^{1}H^{\alpha}$, $^{13}C^{\alpha}$ and $^{13}C^{\beta}$ secondary chemical shifts ($\delta_{observed}$-$\delta_{random\ coil}$) used to deduce the secondary structure of CBD_{N2}. The location of the five β-strands of sheet A are indicated by open arrows, and those of the six β-strands of sheet B are indicated by solid arrows. (i) Hydrogen exchange: Filled circles indicate residues with slow hydrogen-deuterium exchange kinetics ($t_{1/2}$ > 24 hours) and open circles indicate those with fast hydrogen-deuterium exchange kinetics ($t_{1/2}$ < 30 min) at 35 °C and pH* 5.9. (ii) $^{3}J_{HN\text{-}H\alpha}$: Filled circles indicate residues with $^{3}J_{HN\text{-}H\alpha}$ < 6 Hz, half filled circles indicate residues with 6 Hz < $^{3}J_{HN\text{-}H\alpha}$ < 9 Hz, and filled circles indicate residues with $^{3}J_{HN\text{-}H\alpha}$ > 9 Hz. (iii) NOEs: NOEs intensity were estimated visually from the ^{15}N-HSQC NOESY spectrum and classified as weak (short histogram bars), medium (intermediate) and strong (high).

FIGURE S2: Alignment of the eleven β-strands forming sheets A and B in CBD_{N2}. The NOEs used to deduce these arrangements are indicated by arrows. Dotted lines denote the hydrogen bonds included in the structure calculations. Boxed amide hydrogen exhibit significantly retarded hydrogen-deuterium exchange kinetics (filled circles in Figure S1). The positions of four β-bulges in CBD_{N2} are highlighted in bold.


B0
A1
B1
B2
NH exchange
^{J}HN-Hα
dHα(i)HN(i)
dHα(i)HN(i+1)
dHN(i)HN(i+1)
Δ^{1}Hα(ppm)
Δ^{13}Cα(ppm)
Δ^{13}Cβ(ppm)
A2
B3
A3
A4
B4
A5
B5


A1
A2
A5
A3
A4
B1
B0
B2
B5
B5
B3
B4