Investigating the Secondary Structure of Membrane Peptides Utilizing Multiple ²H-labeled Hydrophobic Amino Acids via Electron Spin Echo Envelope Modulation (ESEEM) Spectroscopy

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Supplemental Figures:

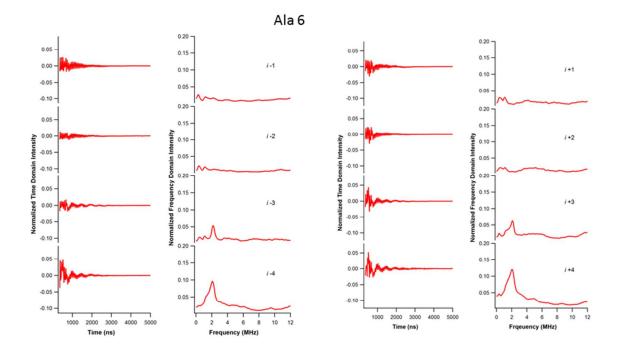
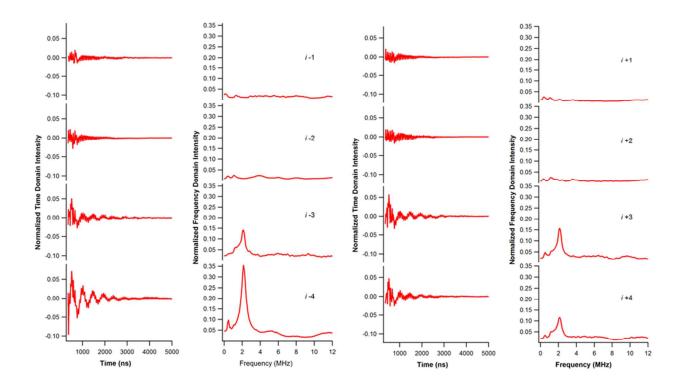


Figure S1: Three-pulse ESEEM experimental data of AChR M2 δ with ²H-labeled d₃ Ala6 at the N-terminal (-) and C-terminal (+) sides in DMPC/DHPC (3.5:1) bicelles at T=200 ns for the *i*+1 to *i*+4 in Time domain and Frequency domain.



Ala 12

Figure S2: Three-pulse ESEEM experimental data of AChR M2 δ with ²H-labeled d₃ Ala12 at the N-terminal (-) and C-terminal (+) sides in DMPC/DHPC (3.5:1) bicelles at T=200 ns for the *i*+1 to *i*+4 in Time domain and Frequency domain.

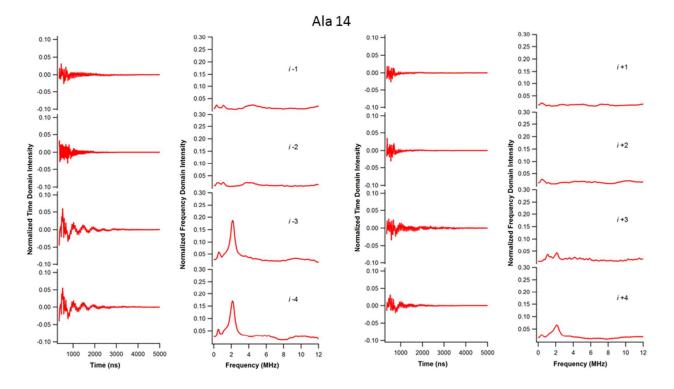


Figure S3: Three-pulse ESEEM experimental data of AChR M2 δ with ²H-labeled d₃ Ala14 at the N-terminal (-) and C-terminal (+) sides in DMPC/DHPC (3.5:1) bicelles at T=200 ns for the *i*+1 to *i*+4 in Time domain and Frequency domain.

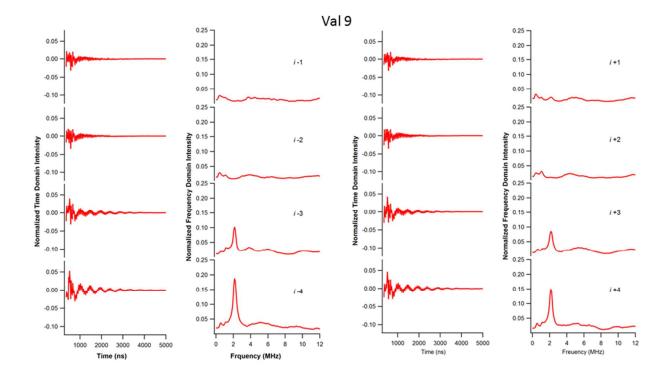


Figure S4: Three-pulse ESEEM experimental data of AChR M2 δ with ²H-labeled d₈ Val9 at the N-terminal (-) and C-terminal (+) sides in DMPC/DHPC (3.5:1) bicelles at T=200 ns for the *i*+1 to *i*+4 in Time domain and Frequency domain.

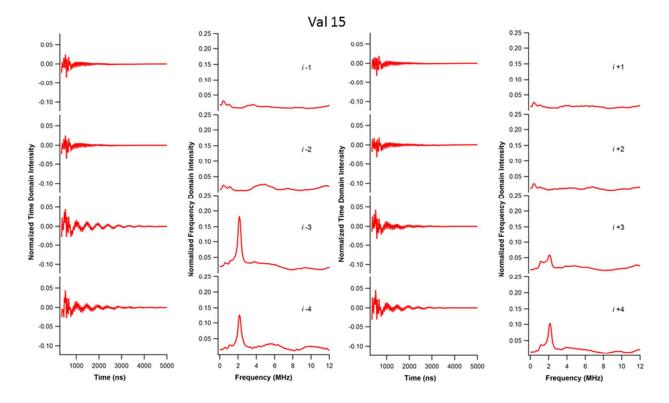


Figure S5: Three-pulse ESEEM experimental data of AChR M2 δ with ²H-labeled d₈ Val15 at the N-terminal (-) and C-terminal (+) sides in DMPC/DHPC (3.5:1) bicelles at T=200 ns for the *i*+1 to *i*+4 in Time domain and Frequency domain.

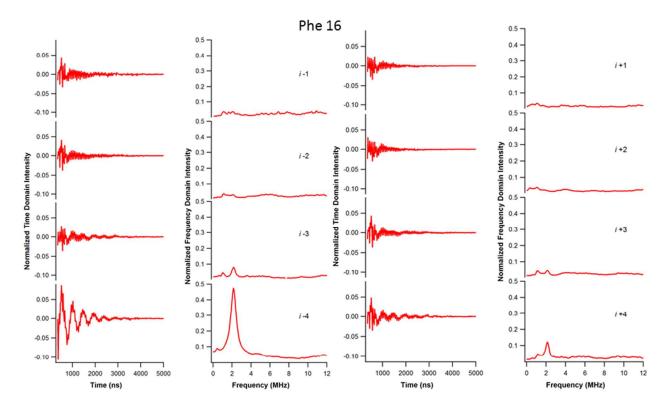


Figure S6: Three-pulse ESEEM experimental data of AChR M2 δ with ²H-labeled d₈ Phe16 at the N-terminal (-) and C-terminal (+) sides in DMPC/DHPC (3.5:1) bicelles at T=200 ns for the *i*+1 to *i*+4 in Time domain and Frequency domain.