Supporting Information for

Solid-state Nuclear Magnetic Resonance on the Static and Dynamic Domains of Huntingtin Exon-1 Fibrils

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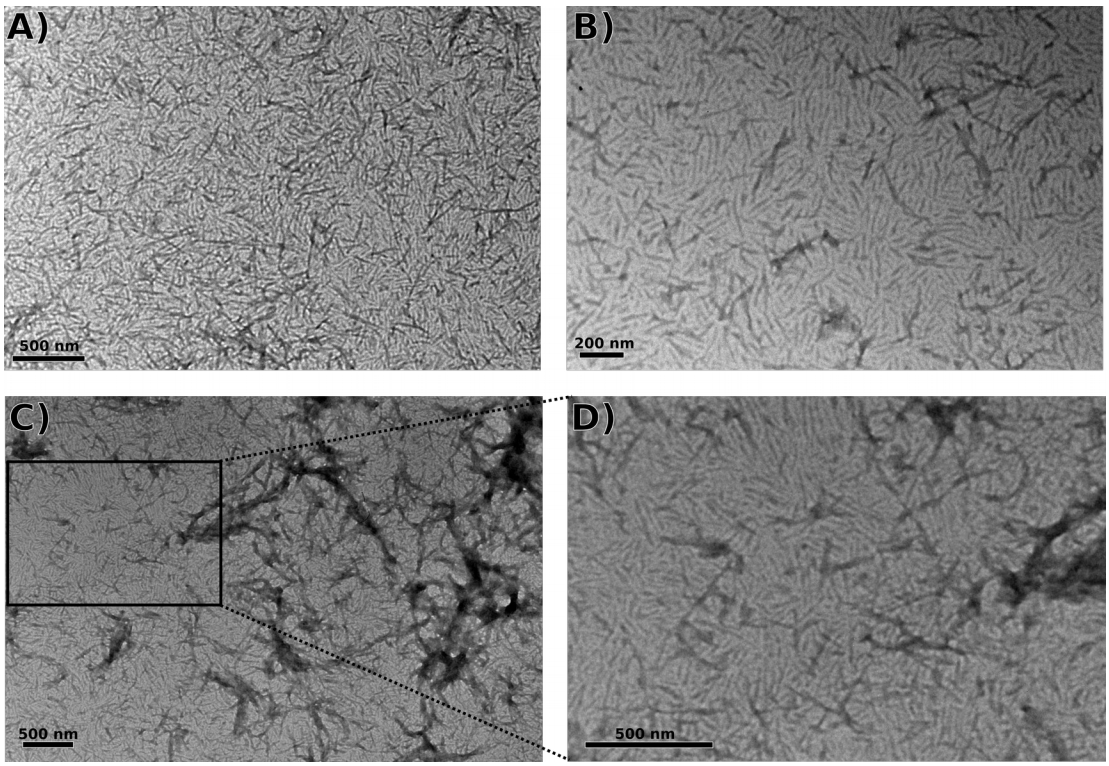
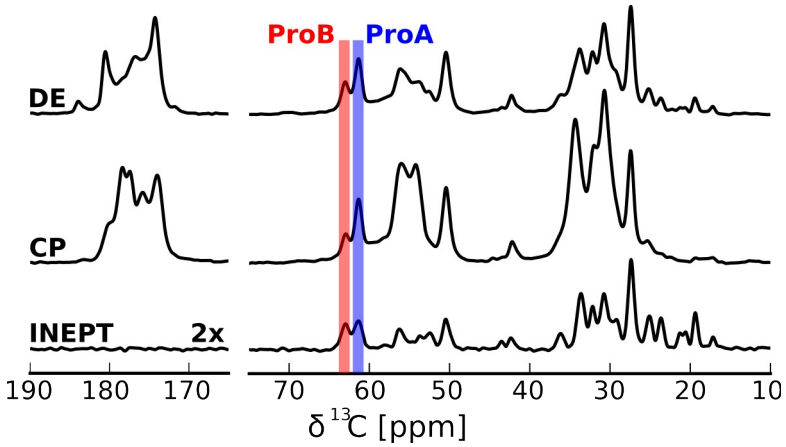


S 1 Figure: EM images of htt_{ex1} fibrils prepared at 4°C. Although the majority of the fibrils is unbundled as seen in the images shown in A), B), and D), there is occasional bundling observed as seen in image C). To prepare the EM samples, 6 µl of fibrils were adsorbed onto copper mesh electron microscopy grids (Electron Microscopy Sciences, Hatfield, PA) for 2 min. These grids were negatively stained for 2 min with 2% uranyl acetate. Electron micrographs were taken using a Gatan digital camera on a JEOL JEM-1400 electron microscope (JEOL, Peabody, MA) at 100 kV.



S 2 Figure: Pro A is dominant in the static domains of htt_{ex1}. 1D ^{13}C spectra of htt_{ex1} recorded using direct excitation (DE), cross polarization (CP), and a refocused INEPT pulse sequence to create the initial ^{13}C magnetization. Where Pro A has the twice the intensity of Pro B in the CP spectra sensitive to the static parts of the fibril, Pro A and Pro B are found of almost equal intensity in the INEPT spectra sensitive to the dynamic domains of htt_{ex1}.

S 3 Table: ^{15}N and ^{13}C chemical shift assignment of the resonances identified in the htt_{ex1} fibril samples. All chemical shifts were referenced externally to DSS using adamantane.

Residue	N	C	CA	CB	CG	CD	CE/CZ	NE2
Gln A	119.3	175.8	56.1	34.2	34.1	178.5		108.6
Gln B	116.6	173.9	54.0	31.8	29.9	177.4		105.7
Gln C	-	173.8	53.4	29.1	33.5	180.5		
Pro A	-	174.3	61.2	30.6	27.3	50.2		
Pro B	-	176.6	62.9	32.1	27.3	50.4		
Glu	-	-	-	30.5	36.3	183.8		
Ala	-	177.5	52.3	19.3				
Leu	-	-	-	42.3	26.9	25.1/23.6		
Val	-	-	62.8	33.0	21.2/20.5			
Arg	-	-	-	-	-	43.4	159.2	
His	-	175.9	56.3	30.9	-	119.9	138.6	
Met	-	-	-	-	-	-	17.0	
Lys	-	-	-	-	-	29.1	42.1	

S 4 Table: ^{1}H chemical shift assignment of the resonances identified in the htt_{ex1} fibril samples. All chemical shifts were referenced externally to DSS using adamantane.

Residue	HA	HB	HG	HD	HE
Gln C	4.61	1.95/2.12	2.45		
Pro A	4.79	2.32	2.00	3.62	
Pro B	4.43	2.38	2.01	3.77	
Ala	4.31	1.35			
Leu	4.66	1.60	1.61	0.90/0.94	
Val	3.74	2.06	0.95/0.94		
Arg	-	-	-	3.14	
His	4.55	3.04	-	-	
Met	-	-	-	-	2.09
Lys	-	-	-	-	3.05