

Supplementary data unit 1

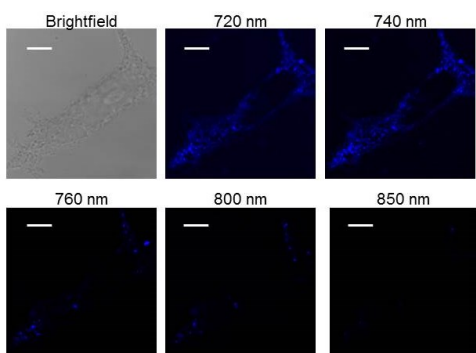


Figure S1

Selected cell overexpressing aS and imaged in transmission and exciting at different wavelengths (brightfield, 720 nm, 740 nm, 760 nm, 800 nm and 850 nm) to verify the absence of contributes due to other sources of autofluorescence, i.e. mainly flavins and lipofuscin. White bar correspond to 30 μm .

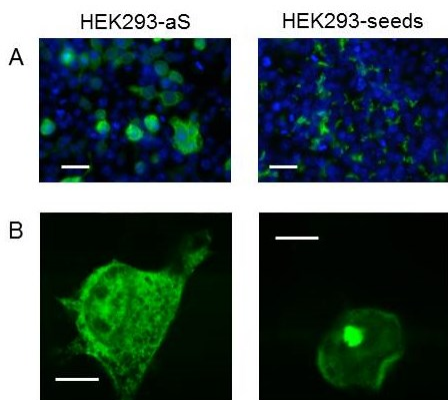


Figure S2

Immunocytochemistry of cells overexpressing aS (on the left) and overexpressing aS and treated with seeds (on the right). aS is stained in green, while the blue staining corresponds to the nuclei. Widefield imaging is shown in panel A (scale bar correspond to 20 μm), while confocal imaging is shown in panel B (scale bar correspond to 10 μm).

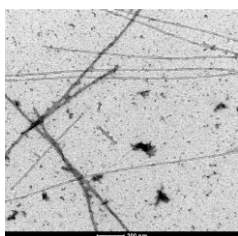


Figure S3

TEM micrograph of aS fibrils obtained aggregating aS in the presence of NADH. aS fibrils formed in the presence of NADH resemble perfectly the morphology of the canonical fibrils that we observed and that were also shown by others before.

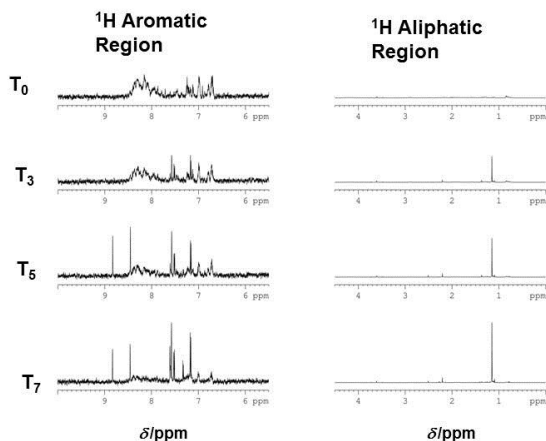


Figure S4

1D ^1H NMR spectra of aS aliquots incubated (5 μM , 37 $^\circ\text{C}$, 1.000 rpm) for different time periods T_0 (no incubation), T_3 (12 days), T_5 (22 days), T_7 (33 days). Aliphatic region (0 – 4.5 ppm) (right panel); aromatic region (5.5 – 10 ppm) (left panel).