

Supporting information for

Label-free detection of early oligomerization of α -Synuclein and its mutants A30P/E46K through solid-state nanopores

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†Electronic supplementary information (ESI) available.

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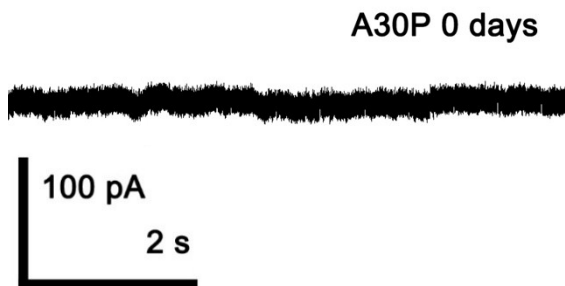


Fig. S1 Representative current trace arising from A30P monomers for 0 day through a solid-state nanopore at 100 mV in a 0.5 M NaCl solution at pH 8.0.

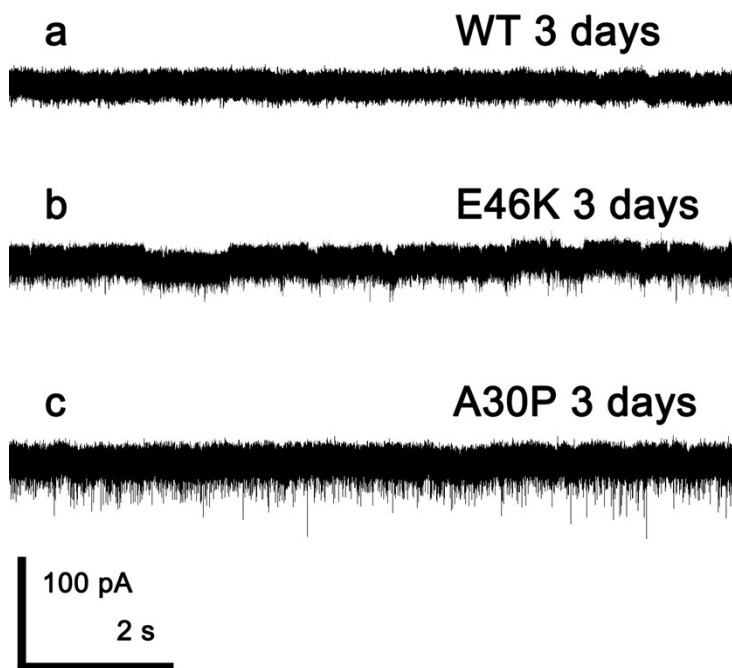


Fig. S2 Representative current traces arising from α -Syn samples for 3-day incubation through solid-state nanopores at 100 mV in a 0.5 M NaCl solution at pH 8.0. (a) WT, (b) E46K, (c) A30P.

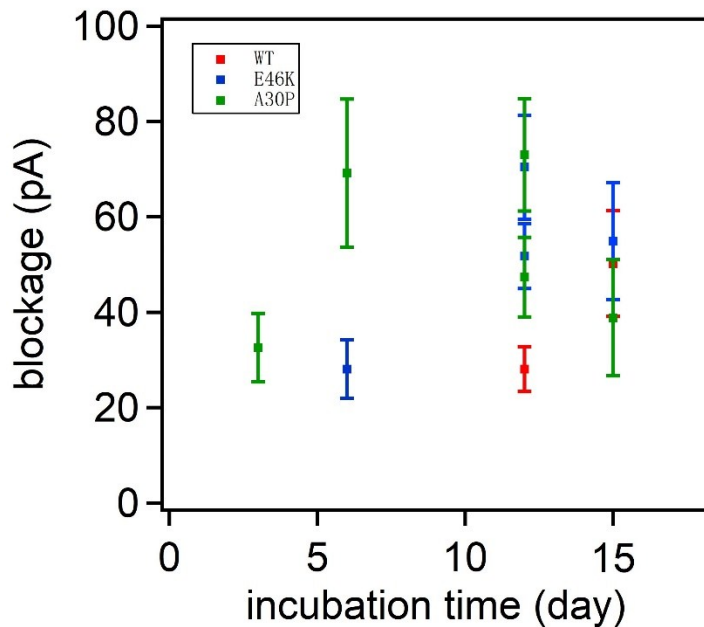


Fig. S3 Gaussian-fitted peak values of current blockage for three α -Syn samples as a function of incubation time. The red, blue and green squares indicate WT, E46K and A30P α -Syn, respectively. At day 12, E46K and A30P give two data points because they have two oligomer types O_{II} and O_{III} at this time point.

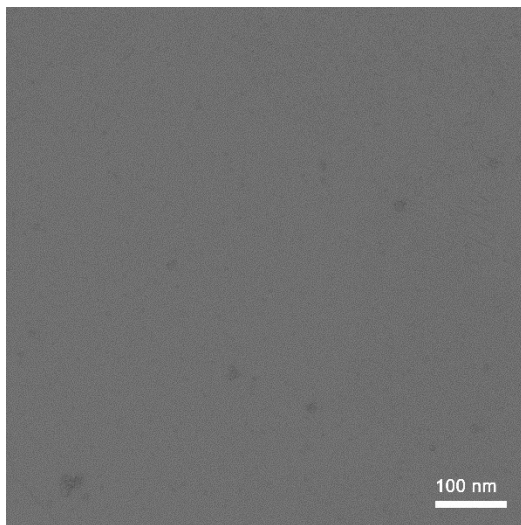


Fig. S4 Representative TEM image of 6-day A30P samples. Barely samples could be seen in this image.

Time Sample	3 days	6 days	12 days	15 days
WT	-	-	9.15 Hz	9.34 Hz
E46K	-	2.16Hz	2.30 Hz	2.59 Hz
A30P	3.09 Hz	13.77 Hz	6.33 Hz	4.10 Hz

Table S1 The dependence of capture rates on incubation time for three α -Syn samples after 3, 6, 12 and 15 days of incubation.