

В

| Control | 0.04 nM | 0.08 nM |
|---------|-----------------------|--|
| | | |
| | | |
| 0.97 | 0.88 | 0.78 |
| 5.56 | 12.53 | 13.04 |
| | | |
| 0.062 | 0.048 | 0.026 |
| 4.05 | 4.47 | 2.74 |
| | 0.97 5.56 0.062 | 0.97 0.88 5.56 12.53 0.062 0.048 |

Figure S1. Concentration-dependent inhibition of caspase-3 by huntingtin. (A) Plot for the inhibitory effects of huntingtin on velocities (V) of caspase-3 – catalyzed reactions at various concentrations of substrate, DEVD-AFC ([S]). Recombinant Caspase-3 (Chemicon) was used in a final concentration of 0.391 nM. Huntingtin was generated by reticulocyte coupled transcription/translation system and dialyzed through 100 kDa Spectra/Por CE membranes (Spectrum Lab, Inc., CA) to reduce the amount of hemoglobin. Dialysates of reticulocyte extracts not expressing huntingtin were used as the controls (■). Due to the limited amount of protein from *in vitro* translated products and dialyze preparation, the highest concentration of huntingtin only reached 0.08 nM (\blacktriangle). Huntingtin was pre-incubated with caspase-3 for 15 min before adding substrate and measured for 45 min at 37°C. As demonstrated using this fluorogenic assay, huntingtin inhibited caspase-3 activity (Figure S1A) in a concentrationdependent manner. In these experiments, huntingtin increased caspase-3 enzymatic Km value and reduced Vmax (Figure S1B). This data is representative of three independent experiments.