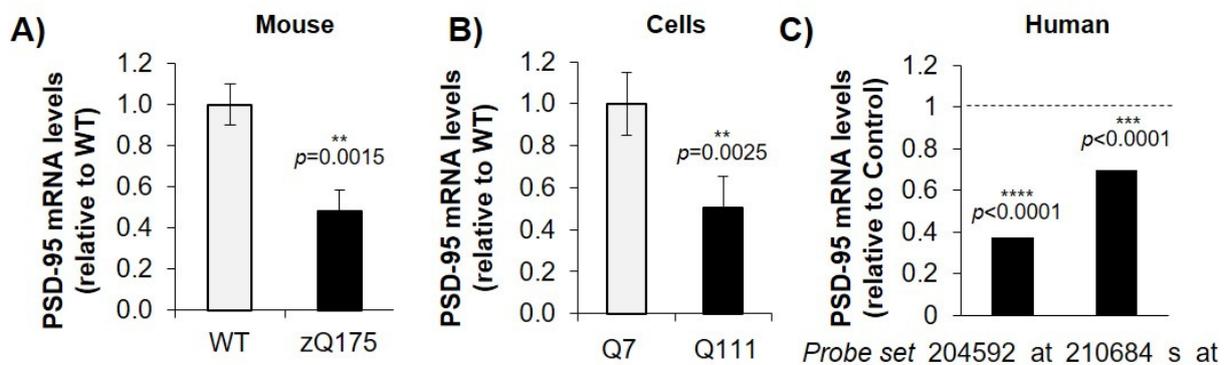


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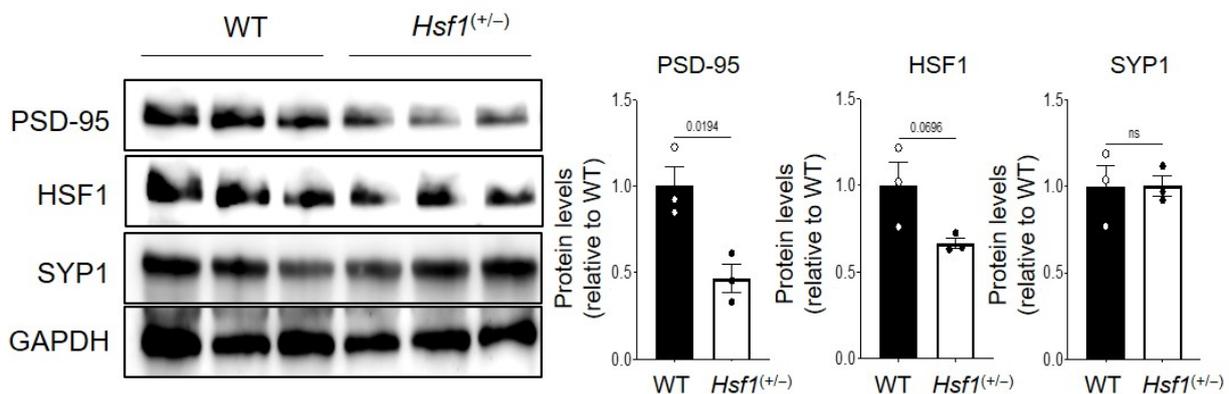
# Heat Shock Factor 1 Directly Regulates Postsynaptic Scaffolding PSD-95 in Aging and Huntington's Disease and Influences Striatal Synaptic Density

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## Supplementary Materials



**Figure S1.** PSD-95 mRNA levels are decreased in HD. PSD-95 mRNA levels in (A) the striatum of WT ( $n = 5$ ) and zQ175 ( $n = 6$ ) mice at 6 months, (B) the immortalized striatal murine cell lines *STHdhQ7* and *STHdhQ111* and (C) in the caudate of patients with HD ( $n = 44$ ) relative to unaffected individuals ( $n = 36$ ) obtained from Hodges et al., [6]. Data is shown as Log2 FC from two different probe sets. Error bars denote mean  $\pm$  SEM. Unpaired Student's *t*-test in A and B. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ , \*\*\*\*  $p < 0.0001$ .



**Figure S2.** PSD-95 protein levels are decreased in cortices of *Hsf1(+/-)* mice. (A) Immunoblotting in the cortex of WT *Hsf1(+/-)* mice ( $n = 3$ ) mice at 6 months. GAPDH is used as a loading control. (B) Protein levels measured using Image J analyses from images in A. Data is normalized to GAPDH levels and relativized to WT. Error bars denote mean  $\pm$  SEM. Unpaired Student's *t*-test. \*  $p < 0.05$ .

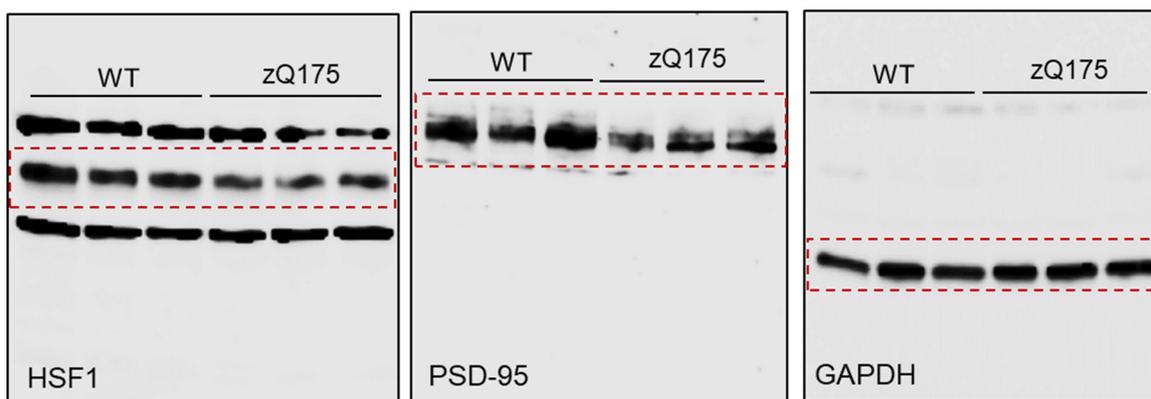
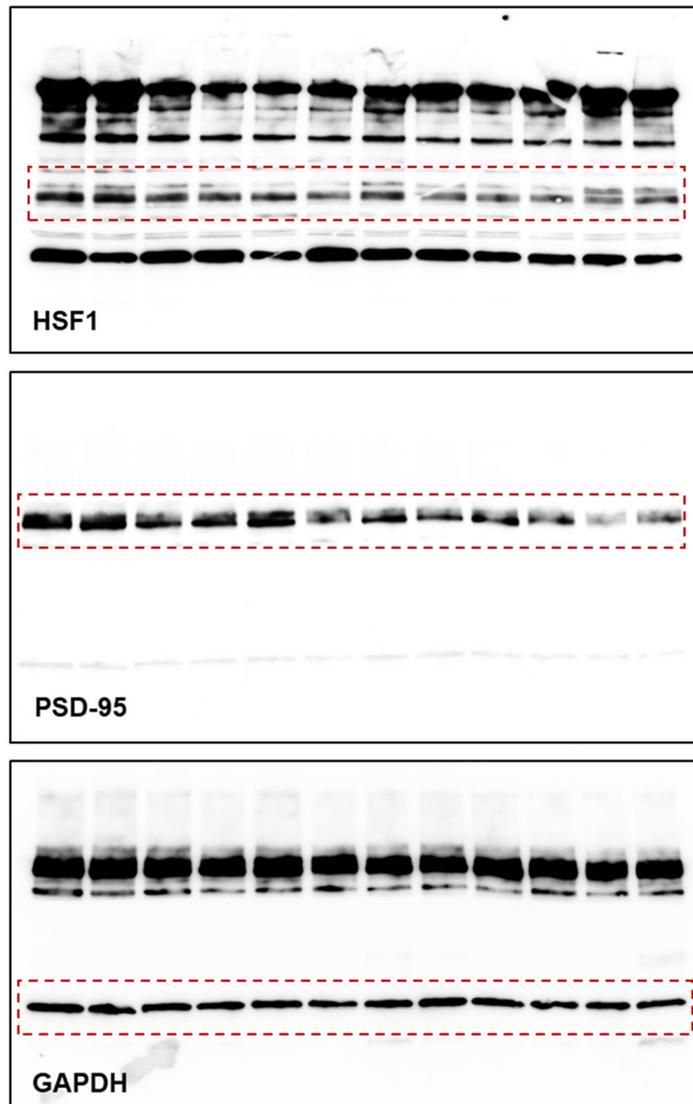


Figure S3. Uncropped blots of Figure 1A,E.

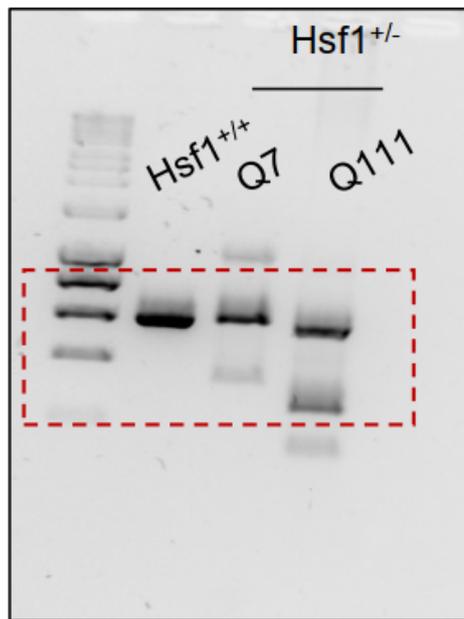
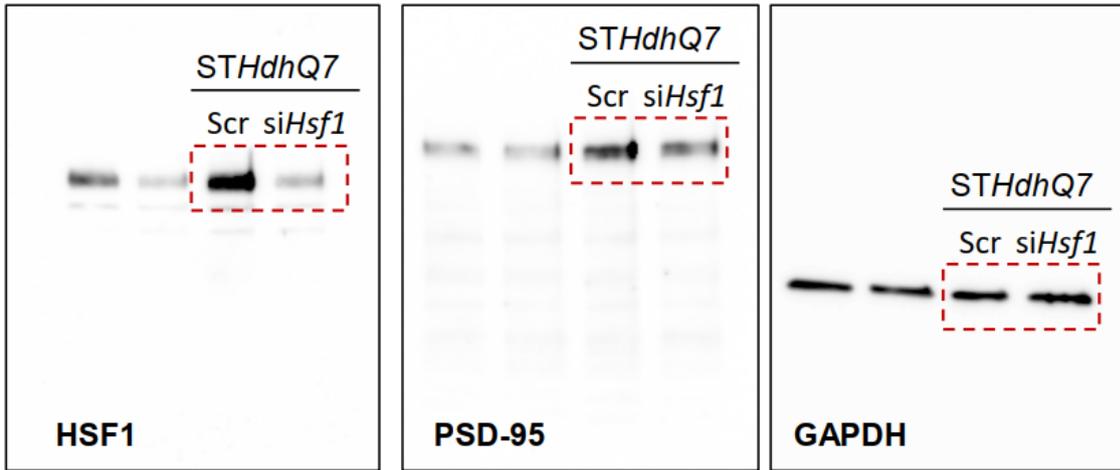


Figure S4. Uncropped blots of Figure 2A,D,E.

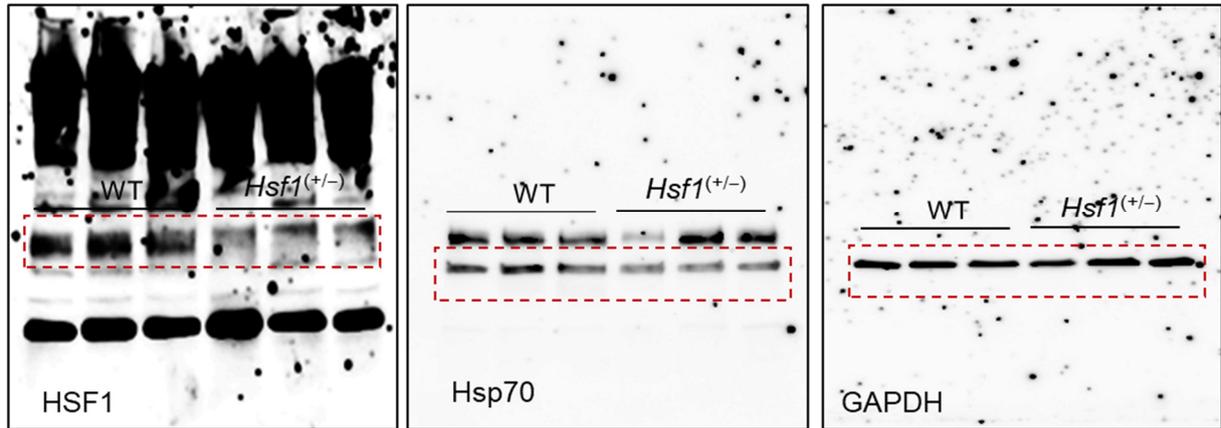


Figure S5. Uncropped blots of Figure 3A.