**Supplementary material**

**Diagrama

Descripción generada automáticamente con confianza mediaSupplementary figure 1.** mTOR activity in dorsal hippocampal samples from WT and R6/1 mice injected with AAV. (a-d) Immunoblotting showing phosphorylated mTOR at Ser2448 (a), mTORC1 readout S6 at Ser235/236 (b) and mTORC2 readout Akt at Ser473 (c) and total proteins mTOR, S6 and Akt as loading controls. Graphs show the densitometric quantification of phosphorylated proteins vs. total levels expressed as the mean ± SEM (P-mTOR Treatment effect: F(1, 34)=0.2055, p=0.6532; Genotype effect: F(1, 34)=0.9312, p=0.3414; P-Akt Treatment effect: F(1, 35)=3.154, p=0.0844; Genotype effect: F(1, 35)=9.757, p=0.0036; P-S6 Treatment effect: F(1, 34)=1.081, p=0.3057; Genotype effect: F(1, 34)=0.004331, p=0.9479). All data were analyzed by two-way ANOVA followed by Bonferroni’s post hoc test: \*\* P<0.01.

**![Imagen que contiene Diagrama

Descripción generada automáticamente]()Supplementary figure 2.** Microglial morphology in WT and R6/1 mice injected with AAV in the hippocampus. Quantitative analysis of microglial cell area (a), length of cell processes (b) and number of endpoints (c), junctions (d), and branches (e). Data are expressed as the mean ± SEM. All data were analysed by two-way ANOVA. No differences were observed in any group.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **PATHOLOGICAL DIAGNOSIS** | **SEX** | **AGE (YEARS)** | **CAG REPEATS** | **HOURS POSTMORTEM** |
| Normal | Male | 83 | - | 13:00 |
| Normal | Male | 76 | - | 11:30 |
| Normal | Male | 58 | - | 5:00 |
| Normal | Male | 64 | - | 10:00 |
| Normal | Male | 86 | - | 10:15 |
| Normal | Male | 58 | - | 5:00 |
| Normal | Male | 86 | - | 7:25 |
| Normal | Male | 82 | - | 2:30 |
| Normal | Female | 83 | - | 7:30 |
| Normal | Female | 93 | - | 5:30 |
| Normal | Female | 83 | - | 7:33 |
| Normal | Female | 83 | - | 7:30 |
| Normal | Female | 97 | - | 7:20 |
| Normal | Female | 93 | - | 5:30 |
| Normal | Female | 83 | - | 7:20 |
| HD, Vonsattel 3-4 | Male | 55 | n.a. | 7:00 |
| HD, Vonsattel 3 | Male | 53 | 45±2 | 7:00 |
| HD, Vonsattel 3 | Male | 85 | 40 | 5:30 |
| HD, Vonsattel 2 | Male | 76 | 20/41 | 6:00 |
| HD, Vonsattel 2 | Male | 72 | n.a. | 13:10 |
| HD, Vonsattel 2-3 | Male | 68 | 42±2 | 6:10 |
| HD, Vonsattel 1 | Male | 73 | 40±2 | 7:00 |
| HD, Vonsattel 3 | Male | 56 | 43 | 4:30 |
| HD, Vonsattel 2-3 | Male | 84 | 39 | 8:00 |
| HD, Vonsattel 2 | Female | 69 | 42 | 15:30 |
| HD, Vonsattel 2 | Female | 86 | 40 | 12:20 |

**Supplementary Table 1. Human postmortem HD brains.** Neuropathological hallmarks are indicated: Vonsattel stages, ranging from I to V and number of CAG repeats.