



## TDP-43 Induced Mouse Model

C57BL/6 mice were injected into the motor cortex with adeno-associated viral (AAV) particles with serotype 9 that express human TDP-43 (AAV9-GFP-hTDP-43). Animals were 3 months of age at start and analyzed for 6 months. Control animals were injected with AAV9-GFP. AAV9-GFP-hTDP-43 injected animals show:

- Increased anxiety
- Learning deficits
- Early motor impairments
- Increased neuroinflammation
- Increased ubiquitination
- Neuronal loss

**Figure 1:**

Wire hanging in AAV9-GFP-hTDP-43 and control mice. Latency to fall off the wire was measured. Two-Way-ANOVA with Bonferroni post hoc test. Mean + SEM. Control: n = 16, hTDP-43: n = 20. \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001.

### Wire Hanging

Figure 1: A

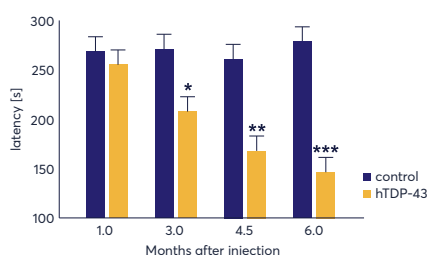
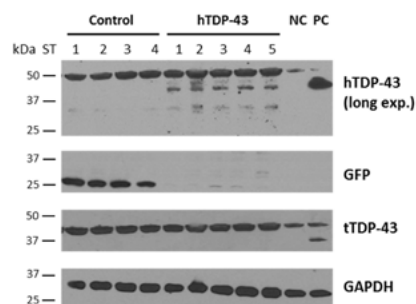


Figure 2:



**Figure 3:**

Immunolabeling of GFP (white), human TDP-43 (red), Iba1 (microglia marker, green) and nuclei (DAPI, blue) in the brain of AAV9-GFP-hTDP-43 injected and control mice. Coronal cut brain samples at 0.62 mm. White box: Area of injection magnified at the right. Virus was injected bilaterally into the motor cortex region M1 of 3 months old mice. Mice were sampled 6 months after injection.

Figure 3: A

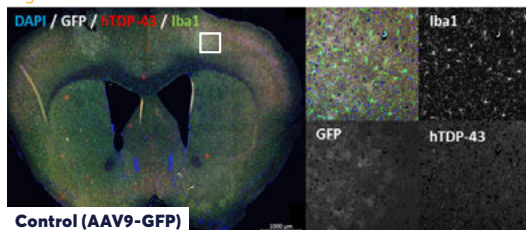


Figure 3: B

