



Line 61 Transgenic Mouse Model

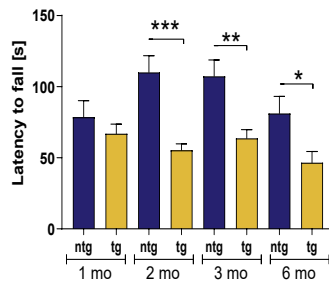
This PD transgenic mouse model overexpresses human wild type α -synuclein under the control of the human Thy1 promoter.

- High expression of α -syn already in young mice
- Axonal α -syn depositions
- Loss of striatal dopaminergic synapses
- Impaired nest building behavior
- Motor deficits in behavioral read outs

Figure 1: RotaRod and Pasta Gnawing test of 1, 2, 3 and 6 month old Line 61 mice. Mean + SEM; n = 13 - 15; Two-way ANOVA with Bonferroni's post hoc test: *p<0.05, **p<0.01, ***p<0.001.

Figure 1

RotaRod



Pasta Gnawing

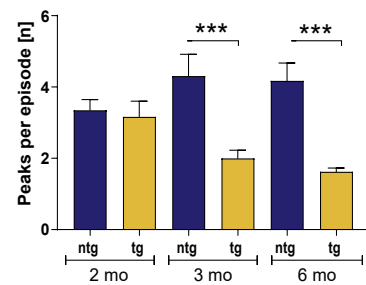


Figure 2: Beam walk test of Line 61 mice. Number of slips on a 13 mm square beam of 5, 16 and 28 week old Line 61 mice and non-transgenic littermates in the beam walk test. n = 13 per group; Mean + SEM; Two-way ANOVA with Tukey's and Sidak's post hoc test. *p<0.05; **p<0.01; ***p<0.001. * indicate significance between genotypes; # indicate significance between age group groups.

Figure 2

Beam Walk

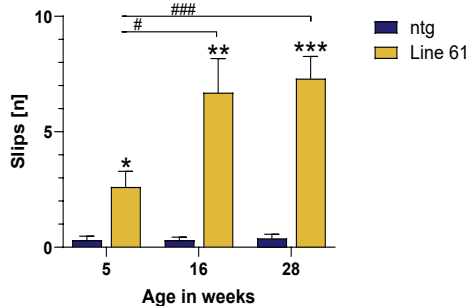
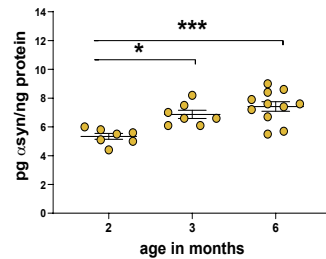


Figure 3

Soluble fraction



Insoluble fraction

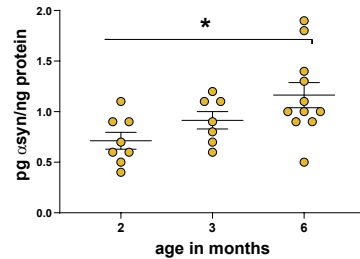


Figure 3: Total hippocampal soluble and insoluble α -synuclein levels of 2, 3 and 6 month old male Line 61 mice. Mean + SEM; n = 8; One-way ANOVA; *p<0.05; ***p<0.001.

