



## Spine Density Analysis

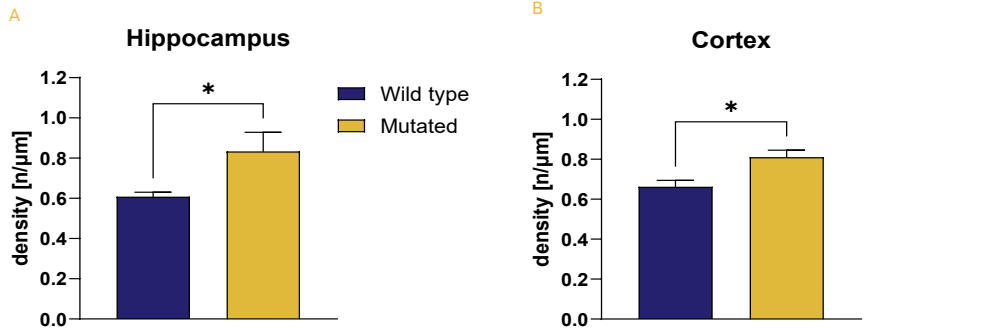
Golgi-Cox staining is well established at Scantox Neuro, preferentially using the Super Golgi Kit (Bioenno Lifesciences). Exemplary data are shown in Figure 1 and 2.

Brain tissue was impregnated, then sectioned with a vibratome, mounted, stained, and embedded. Z-stacks of images were captured from dendrites using 40x or 63x Oil lenses, the spines were identified and quantified using automated unbiased image analysis.

**Figure 1:** Quantification of spine density in the hippocampus (A) and cortex (B) of mutated and wild type animals. Data derived from 10 dendrites per case and per brain region; n = 6 per group. Parametric two-tailed unpaired t-test; normal distribution was verified by Kolmogorov-Smirnov test. Mean + SEM. \*p<0.05.

Figure 1

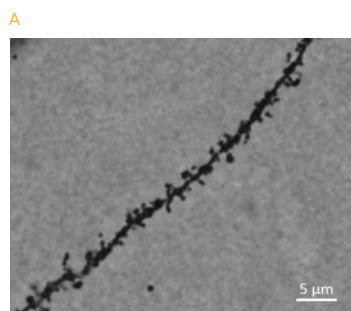
### Spine Density



**Figure 2:** Examples of Golgi-Cox-stained dendritic spines in hippocampus (A) and cortex (B).

Figure 2

### Hippocampus CA1



### Frontal Cortex

