### **Supplementary file 2. NTE/SWS expression in the surface glia is important for the integrity of Drosophila BBB**

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| --- | --- | --- | --- | --- | --- |
| *Genotype* | Phenotypes | | | P-value | Number of brain hemi-spheres analyzed |
| **No lesions** | **Lesions** | **Lesions + membrane clusters** |
| *Control*  *OR x w1118* | 100% | 0% | 0% |  | 96 |
| *sws1* | 14% | 11% | 75% | ap = 9.9E-31 | 85 |
| *sws1/sws4* | 13% | 28% | 59% | ap = 3.3E-29 | 69 |
| *repo, nSyb>swsRNAi* | 7% | 24% | 69% | ap = 1.5E-31 | 62 |
| *repo>/Oregon R* | 99% | 1% | 0% | ap = 0.27 | 80 |
| *repo>swsRNAi* | 1% | 13% | 86% | bp = 1.2E-31 | 70 |
| *sws1; repo>sws* | 100% | 0% | 0% | bp = 0.46  cp = 2.3E-24 | 43 |
| *sws1; repo>hNTE* | 100% | 0% | 0% | bp = 1  cp = 1.6E-28 | 62 |
| *moody>/Oregon R* | 100% | 0% | 0% | ap = 1 | 67 |
| *moody>swsRNAi* | 15% | 15% | 70% | bp = 1.1E-22 | 72 |
| *sws1; moody>sws* | 98% | 2% | 0% | bp = 0.3  cp = 4.3E-21 | 63 |
| *sws1; moody>hNTE* | 100% | 0% | 0% | bp = 1  cp = 1.9E-21 | 61 |
| *Gli>/Oregon R* | 100% | 0% | 0% | ap = 1 | 58 |
| *Gli>swsRNAi* | 8% | 12% | 80% | bp = 2.4E-22 | 60 |
| *sws1; Gli>sws* | 98% | 0% | 2% | bp = 0.34  cp = 5.5E-23 | 65 |
| *sws1; Gli>hNTE* | 100% | 0% | 0% | bp = 1  cp = 8.9E-23 | 60 |
| *moody* *ΔC17* | 17% | 23% | 60% | ap = 1.2E-32 | 118 |
| *moody>moodyRNAi* | 4% | 0% | 96% | ap = 1.5E-27 | 28 |

a – compared to control (*OR x w1118*)

b – compared to *Gal4-driver x OR*

c – compared to *Gal4-driver x UAS-swsRNAi*

The values are reported from experiments done in triplicates. For statistical analyses of the observed phenotypes, two-way tables and χ2-test were used.