|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Experiments** | **Age** | **Genotype** | **Sex** | **Technical replicates** |
| * Microglia number/plaque area
* Plaque size
* Dystrophic neurite size
* Microglia number/dystrophic neurite size
 | 3M | APPPS1 | ♂♀♀♀♀ (N=5) | 30 cortical (neocortex) plaques from 6 brain sections per mouse  |
| APP-KI | ♂♂♂♂ (N=4) |
| * CD68 coverage/plaque area
* CD68 coverage/microglia number
 | 3M | APPPS1 | ♂♂♀ (N=3) | 30 cortical (neocortex) plaques from 3 brain sections per mouse |
| APP-KI | ♂♂♂ (N=3) |
| * Total Aβ coverage
 | 3M | APPPS1 | ♂♀♀♀ (N=4) | 18 cortical (neocortex) images from 3 brain sections per mouse |
| APP-KI | ♂♂♂♂ (N=4) |
| * % pE3-Aβ coverage
* % pE3- Aβ coverage/total Aβ coverage
 | 12M | APPPS1 | ♂♂♂♀ (N=4) |
| APP-KI | ♂♀♀♀ (N=4) |
| * LCOs analysis
 | 3M | APPPS1 | ♀♀♀ (N=3) | 20 cortical (neocortex) plaques from 3 brain sections per mouse |
| APP-KI | ♂♂♂ (N=3) |
| 12M | APPPS1 | ♂♂♀ (N=3) |
| APP-KI | ♂♀♀ (N=3) |

**Supplementary file 5**