**Supplementary file 1**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | **Condition &  Genotype** | ***N*** | ***n of ribbons* with CC structures/total n** | **Clathrin-coated (CC) structures** | | | | | | | **0 – 100 nm** | **100 – 200 nm** | | | **200 - 500 nm** | | | CCVs | Invagina-tions | CCVs | Invagina-tions | CCVs | Invagina-tions | |  |  |  | (y=Distance to membrane, x=Distance to PD, d=Diameter in nm) | | | | | | | ChR2ShortStim | 1 | 1/11 ribbons | - | - | - | - | y=38  x=455  d=121 | - | |  |  | 2/11 ribbons | - | - | - | - | y=54  x=498  d=102 | - | | ChR2LongStim | 4 | 1/26 ribbons | - | - | - | x=160 | y=48  x=345  d=69 | - | |  |  | 2/26 ribbons | - | - | y=78  x=144  d=109 | - | - | - | |  |  | 1/26 ribbons | - | - | - | - | - | x=315 | | LongStim  B6J | 2 | 1/15 ribbons | - | - | y=8 x=126 d=107 | - | - | - | |  |  | 2/15 ribbons | - | x=80 | y=30 x=185 d=94 | - | - | - | |  |  | 3/15 ribbons | - | - | y=8 x=170 d=74 | - | - | - | | ChR2 NoLight | 4 | 1/17 ribbons | y=48 x=90 d=63 | - | - | - | - | - | |

**List of clathrin-coated (CC) structures at the active zone**

Statistics could not be performed due to the rare abundance of CC structures at the AZ in our tomograms. The grey columns indicate CC structures intermingled with the MP-SV pool.