|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Strains**  **Adhesion Force**  **(nN)** | **WT- SAG**  **+ Ciliobrevin D** | **WT- SAG**  **- Ciliobrevin D** | **CRISPR*XylT1A***  **+ Ciliobrevin D** | **CRISPR*XylT1A***  **- Ciliobrevin D** |
| **minimum** | 1.02 | 0.59 | 1.07 | 0.38 |
| **25th percentile** | 2.08 | 1.02 | 1.44 | 0.70 |
| **median** | 2.63 | 1.50 | 1.84 | 1.08 |
| **75th percentile** | 3.49 | 2.18 | 2.13 | 1.78 |
| **maximum** | 4.45 | 3.63 | 3.57 | 2.75 |

**Figure 4 – Source Data 1: Adhesion force under blue light**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Strains**  **Adhesion Force**  **(nN)** | **WT- SAG**  **+ Ciliobrevin D** | **WT- SAG**  **- Ciliobrevin D** | **CRISPR*XylT1A***  **+ Ciliobrevin D** | **CRISPR*XylT1A***  **- Ciliobrevin D** |
| **minimum** | 1.02 | 0.59 | 1.07 | 0.38 |
| **25th percentile** | 2.08 | 1.02 | 1.44 | 0.70 |
| **median** | 2.63 | 1.50 | 1.84 | 1.08 |
| **75th percentile** | 3.49 | 2.18 | 2.13 | 1.78 |
| **maximum** | 4.45 | 3.63 | 3.57 | 2.75 |

**Figure 4 – Source Data 2: Adhesion force under red light**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Strains**  **Adhesion Force**  **(nN)** | **WT- SAG**  **+ Ciliobrevin D** | **WT- SAG**  **- Ciliobrevin D** | **CRISPR*XylT1A***  **+ Ciliobrevin D** | **CRISPR*XylT1A***  **- Ciliobrevin D** |
| **minimum** | 0.04 | 0.03 | 0.02 | 0.06 |
| **25th percentile** | 0.07 | 0.08 | 0.05 | 0.11 |
| **median** | 0.10 | 0.13 | 0.09 | 0.21 |
| **75th percentile** | 0.19 | 0.18 | 0.30 | 0.30 |
| **maximum** | 0.35 | 0.27 | 0.41 | 0.42 |

**Figure 4 – Source Data 3: Adhesion force of each cell under blue light**

|  |  |  |  |
| --- | --- | --- | --- |
| **WT- SAG**  **+ Ciliobrevin D**  **(N=23cells)** | **WT- SAG**  **- Ciliobrevin D**  **(N=32cells)** | **CRISPR*XylT1A***  **+ Ciliobrevin D**  **(N=24cells)** | **CRISPR*XylT1A***  **- Ciliobrevin D**  **(N=28cells)** |
| |  | | --- | | 1.02 | | 1.15 | | 1.69 | | 1.82 | | 2.02 | | 2.08 | | 2.09 | | 2.12 | | 2.51 | | 2.52 | | 2.53 | | 2.63 | | 2.70 | | 2.74 | | 2.82 | | 3.02 | | 3.22 | | 3.59 | | 3.61 | | 3.61 | | 3.67 | | 4.45 | | 5.62 | | |  | | --- | | 0.59 | | 0.62 | | 0.70 | | 0.73 | | 0.93 | | 0.95 | | 0.98 | | 0.99 | | 1.05 | | 1.07 | | 1.08 | | 1.19 | | 1.30 | | 1.31 | | 1.34 | | 1.49 | | 1.51 | | 1.71 | | 1.75 | | 1.76 | | 1.81 | | 1.94 | | 1.97 | | 2.10 | | 2.26 | | 2.49 | | 2.54 | | 2.65 | | 2.66 | | 3.63 | | 4.16 | | 4.19 | | |  | | --- | | 1.07 | | 1.21 | | 1.37 | | 1.39 | | 1.41 | | 1.42 | | 1.46 | | 1.49 | | 1.51 | | 1.74 | | 1.75 | | 1.83 | | 1.85 | | 1.87 | | 1.91 | | 2.02 | | 2.05 | | 2.12 | | 2.14 | | 2.25 | | 2.47 | | 2.93 | | 3.06 | | 3.40 | | |  | | --- | | 0.38 | | 0.39 | | 0.55 | | 0.56 | | 0.56 | | 0.60 | | 0.68 | | 0.73 | | 0.74 | | 0.75 | | 0.76 | | 0.80 | | 0.89 | | 0.95 | | 1.21 | | 1.33 | | 1.35 | | 1.41 | | 1.44 | | 1.70 | | 1.77 | | 1.80 | | 1.86 | | 1.92 | | 1.92 | | 2.05 | | 2.52 | | 2.75 | |

**Figure 4 – Source Data 4: Adhesion force of each cell under red light**

|  |  |  |  |
| --- | --- | --- | --- |
| **WT- SAG**  **+ Ciliobrevin D**  **(N=23cells)** | **WT- SAG**  **- Ciliobrevin D**  **(N=32cells)** | **CRISPR*XylT1A***  **+ Ciliobrevin D**  **(N=24cells)** | **CRISPR*XylT1A***  **- Ciliobrevin D**  **(N=28cells)** |
| |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  | | --- | | 0.04 | | 0.04 | | 0.04 | | 0.05 | | 0.05 | | 0.07 | | 0.07 | | 0.07 | | 0.08 | | 0.08 | | 0.08 | | 0.10 | | 0.11 | | 0.14 | | 0.14 | | 0.16 | | 0.18 | | 0.19 | | 0.22 | | 0.28 | | 0.30 | | 0.35 | | 0.42 | | | |  | | --- | | 0.03 | | 0.05 | | 0.05 | | 0.06 | | 0.06 | | 0.07 | | 0.07 | | 0.08 | | 0.09 | | 0.09 | | 0.09 | | 0.09 | | 0.10 | | 0.11 | | 0.11 | | 0.13 | | 0.13 | | 0.13 | | 0.14 | | 0.14 | | 0.14 | | 0.16 | | 0.17 | | 0.17 | | 0.18 | | 0.19 | | 0.21 | | 0.21 | | 0.23 | | 0.25 | | 0.27 | | 0.34 | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  | | --- | | 0.02 | | 0.02 | | 0.03 | | 0.04 | | 0.04 | | 0.05 | | 0.05 | | 0.05 | | 0.06 | | 0.06 | | 0.09 | | 0.09 | | 0.10 | | 0.12 | | 0.12 | | 0.16 | | 0.23 | | 0.26 | | 0.33 | | 0.34 | | 0.35 | | 0.41 | | 2.25 | | 3.40 | | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  | | --- | | 0.06 | | 0.09 | | 0.09 | | 0.09 | | 0.09 | | 0.10 | | 0.11 | | 0.12 | | 0.12 | | 0.14 | | 0.16 | | 0.19 | | 0.19 | | 0.20 | | 0.21 | | 0.22 | | 0.22 | | 0.23 | | 0.25 | | 0.29 | | 0.30 | | 0.31 | | 0.34 | | 0.34 | | 0.36 | | 0.39 | | 0.42 | | 0.61 | | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |