|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **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 |

 |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |

 |