

**Table S2. Expression of Burs $\alpha$ , Burs $\beta$ , CCAP and Mip in CCAP-INs in *wit* mutants**

| Peptide hormone            | <i>OK6</i> control               | <i>OK6 wit</i> <sup>-/-</sup>                      |
|----------------------------|----------------------------------|--|
| Burs $\alpha$ <sup>†</sup> | 100 $\pm$ 32.8% ( <i>n</i> =122) | 106.1 $\pm$ 34.4% ( <i>n</i> =122); <i>P</i> =0.3  |
| Burs $\beta$ <sup>†</sup>  | 100 $\pm$ 44.0% ( <i>n</i> =102) | 85.6 $\pm$ 26.6% ( <i>n</i> =194); <i>P</i> =0.01* |
| CCAP <sup>‡</sup>          | 10.3 $\pm$ 2.0 ( <i>n</i> =16)   | 11.1 $\pm$ 1.9 ( <i>n</i> =15); <i>P</i> =0.21     |
| Mip <sup>‡</sup>           | 7.5 $\pm$ 2.3 ( <i>n</i> =12)    | 7.1 $\pm$ 1.6 ( <i>n</i> =13); <i>P</i> =0.6       |

In *wit* mutants (*wit*<sup>-/-</sup>), no change in CCAP, Mip or Burs $\alpha$  expression was observed in CCAP-INs. Burs $\beta$  expression was subtly downregulated with marginal significance, as illustrated in the scatter plot (below), which shows the distribution of normalized intensity of Burs $\beta$  expression in control animals and *wit* mutants, emphasizing the limited level of downregulation despite marginal statistical significance (mean  $\pm$  s.d). Genotypes: *OK6* control (*OK6-GAL4, UAS-nEGFP/+; wit*<sup>A12/+</sup>); *OK6 wit*<sup>-/-</sup> (*OK6-GAL4, UAS-nEGFP/+; wit*<sup>A12/wit</sup><sup>B11</sup>).

<sup>†</sup>Expression for each peptide hormone is expressed as the relative (percentage) fluorescence intensity (normalized to the mean of the pertinent control) per individual CCAP-EN (*n*, the number of CCAP-ENs).

<sup>‡</sup>The number of CCAP-INs per VNC that express the peptide hormone (*n*, number of VNCs).

\*Compared with pertinent control; NSD, no significant difference.

