

## Supplementary Figure Captions

### Supplementary Figure 1

A common logarithm transformation of ramp slope and ON currents of Top and Bottom (**A**) and Large and Small (**B**) OB DA neurons. The linear equations used to compare for difference between the slopes of two lines and the resulting p-values are also displayed. From these equations, the derived power functions (defined as  $y = 10^b \cdot x^m$ , where  $b$  is the y-intercept of the log-log plot and  $m$  is the slope of the line in the log-log plot) are  $y = 10^{1.767} \cdot x^{0.4494}$  for Top neurons,  $y = 10^{1.657} \cdot x^{0.4281}$  for Bottom neurons,  $y = 10^{1.827} \cdot x^{0.4274}$  for Large neurons,  $y = 10^{1.612} \cdot x^{0.4210}$  for Small neurons.

### Supplementary Figure 2

A common logarithm transformation of ramp slope and OFF currents of Top and Bottom (**A**) and Large and Small (**B**) OB DA neurons. The linear equations used to compare for difference between the slopes of two lines and the resulting p-values are also displayed. From these equations, the derived power functions are  $y = 10^{2.116} \cdot x^{0.4359}$  for Top neurons,  $y = 10^{1.993} \cdot x^{0.4537}$  for Bottom neurons,  $y = 10^{2.194} \cdot x^{0.4026}$  for Large neurons,  $y = 10^{1.905} \cdot x^{0.4729}$  for Small neurons.

### Supplementary Figure 3

A common logarithm transformation of ramp slope and spike frequency of Top and Bottom (**A**) and Large and Small (**B**) OB DA neurons. The linear equations used to compare for difference between the slopes of two lines and the resulting p-values are also displayed. From these equations, the derived power functions are  $y = 10^{1.568} \cdot x^{0.29}$  for Top neurons,  $y = 10^{1.567} \cdot x^{0.3068}$  for Bottom neurons,  $y = 10^{1.566} \cdot x^{0.2649}$  for Large neurons,  $y = 10^{1.626} \cdot x^{0.3217}$  for Small neurons.

### Supplementary Figure 4

A common logarithm transformation of ramp slope and number of spikes of Top and Bottom (**A**) and Large and Small (**B**) OB DA neurons. The linear equations used to compare for difference between the slopes of two lines and the resulting p-values are also displayed. From these equations, the derived power functions are  $y = 10^{0.5636} \cdot x^{-0.3035}$  for Top neurons,  $y = 10^{0.4046} \cdot x^{-0.1875}$  for Bottom neurons,  $y = 10^{0.6208} \cdot x^{-0.3859}$  for Large neurons,  $y = 10^{0.3994} \cdot x^{-0.1909}$  for Small neurons.