

**Table S1**

|              | WT   | <i>msn</i> | <i>slpr</i> | <i>hep</i> | <i>bsk</i> | <i>rl</i> | <i>puc</i> | <i>rac1</i> | <i>p38a</i> | <i>p38b</i> | <i>cdc42</i> |
|--------------|------|------------|-------------|------------|------------|-----------|------------|-------------|-------------|-------------|--------------|
| WT           | 2.43 |            |             |            |            |           |            |             |             |             |              |
| <i>msn</i>   |      | 2.27       |             |            |            |           |            |             |             |             |              |
| <i>slpr</i>  |      |            | 2.30        |            |            |           |            |             |             |             |              |
| <i>hep</i>   |      |            |             | 2.27       |            |           |            |             |             |             |              |
| <i>bsk</i>   |      |            |             |            | 2.08       | 2.24      | 2.25       | 2.23        |             |             |              |
| <i>rl</i>    |      |            |             |            |            | 2.52      | 2.47       | 2.22        |             |             |              |
| <i>puc</i>   |      |            |             |            |            |           | 2.10       | 2.07        |             |             |              |
| <i>rac1</i>  |      |            |             |            |            |           |            | 2.24        |             |             |              |
| <i>p38a</i>  |      |            |             |            |            |           |            |             | 2.38        |             |              |
| <i>p38b</i>  |      |            |             |            |            |           |            |             |             | 2.38        |              |
| <i>cdc42</i> |      |            |             |            |            |           |            |             |             |             | 2.11         |

**Table S1. Fluorescence Lifetimes (FL) of S2R+ cells subjected to distinct single and double knockdowns at rest**

FL measurements not significantly differing of the wild type (WT) values are displayed in blue. FL values significantly smaller than WT ones are displayed in red. FL values significantly bigger than WT ones are displayed in green.