



**Supplementary Figure 1 | Sequence alignment of mouse K2P channels.** Alignment of mouse K2P channels colored by conservation. TASK2 secondary structure is drawn above the sequences with gaps and unmodeled residues shown as dashed lines, loops and non-helical secondary structure as gray lines, and selectivity filters as green lines. Residues implicated in the extracellular gate are indicated with green boxes, residues implicated in the intracellular gate with red boxes, and disulfide bond forming C51 with a yellow box.