

Supplementary Information

1. Sensitivity Analysis

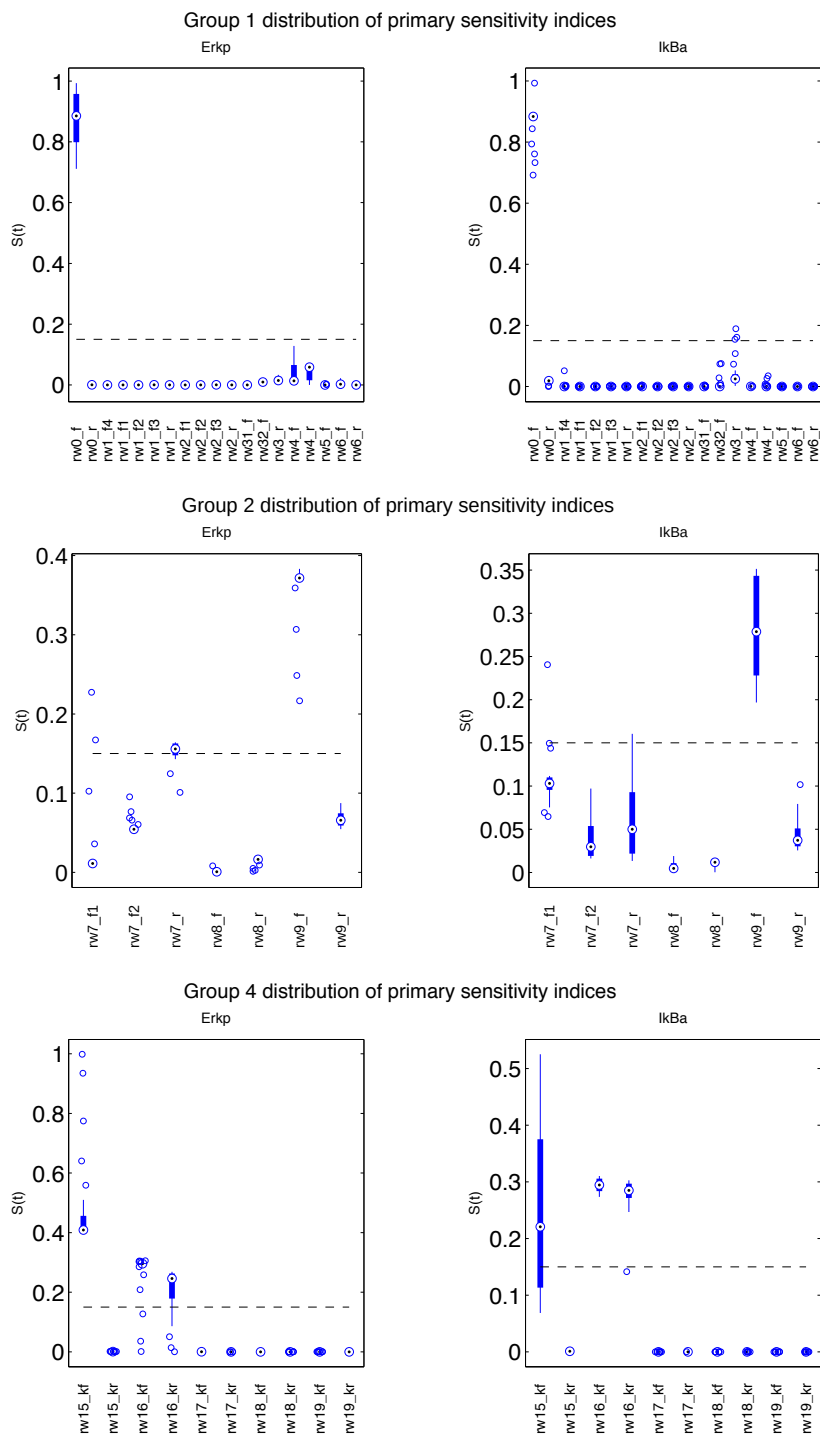


Figure S1. Cont.

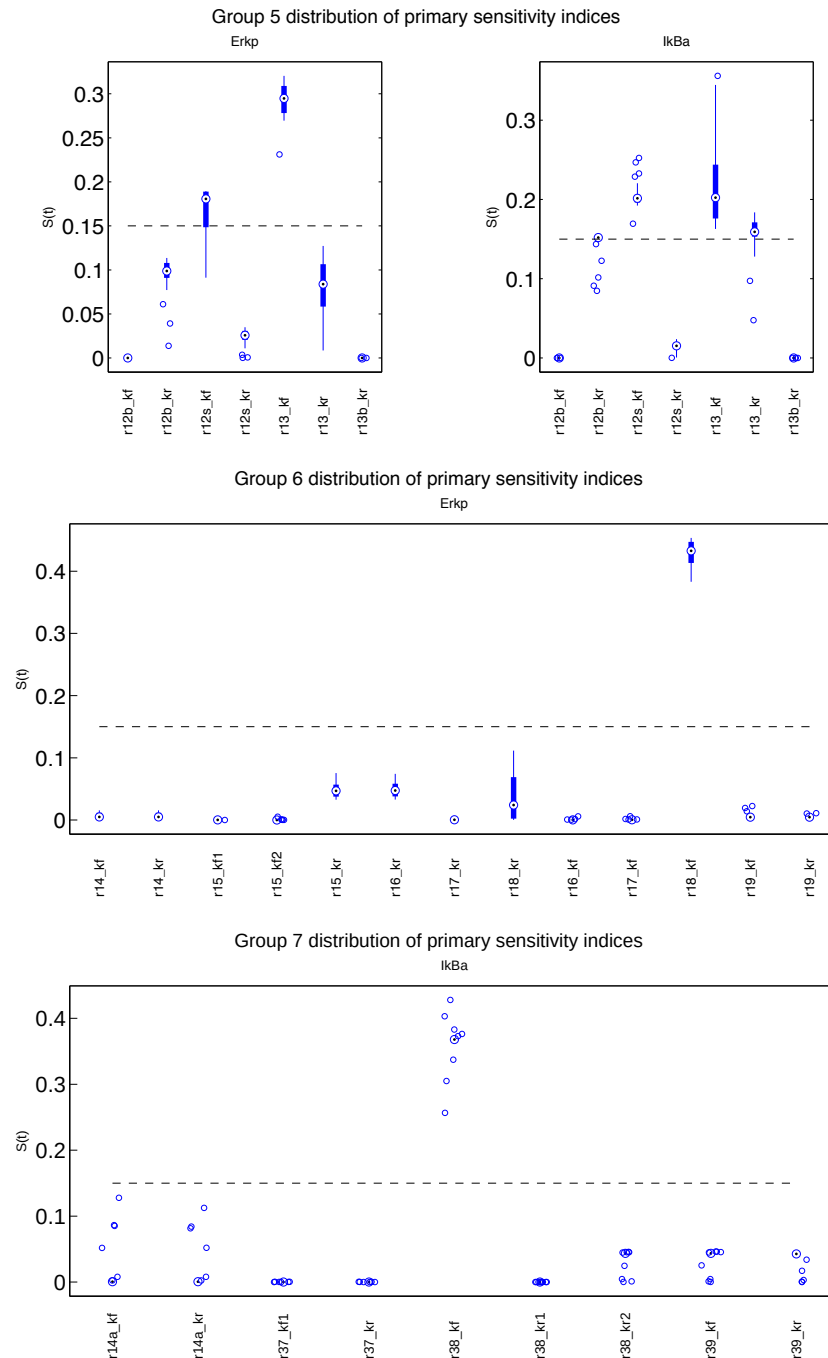


Figure S1. The results of Sobol sensitivity analysis conducted for six parameter groups. The distribution of primary Sobol indices are presented as box and whisker plots. The criterion for inclusion in the parameter screen was a median ($\cdot$) sensitivity greater than 0.15. Note that there is no feedback between the Erk and NF- κ B pathways and thus for group six we show the sensitivity of Erk only and for group seven we show the sensitivity of IkB only. Due to issues with stiffness, we did not conduct sensitivity analysis with respect to parameters from group three.