

Reaction Nr	Reaction	Rate [s-1] 1 st order Rate [M-1 s-1] 2 nd order	Reverse rate [s-1]
1	RasD → RasT	Rate 1 (see table S4)	
2	RasT → RasD	Rate 2 (see table S4)	
3	RasD + GEF ↔ RasD_GEF	1.5e7	0.13
4	RasD_GEF → GEF + RasT	Rate 4 (see table S4)	
5	RasT + GAP ↔ RasT_GAP	3e7	1
6	RasT_GAP → RasD + GAP	Rate 6 (see table S4)	
7	RasT + EFF ↔ RasT_EFF	2.9e6	Rate 7b (see table S4)

Supplementary Table S3. Reactions of the network model to simulate Ras WT and missense mutations.