

Movie S1: Rab6 activation by the Ric1-Rgp1 complex

Initially, Rab6, colored in yellow, is shown bound to GDP, colored in red, representing the GTPase in the inactive state. Rab6 is shown diffusing in and "morphing" to the nucleotide free conformation upon association with the GEF domain of Ric1 colored in blue. In this conformation, the GDP freely diffuses and is exchanged for GTP which is colored in green. Rab6 undergoes a conformational change once again and is shown transitioning to the GTP bound state. The GTP-bound Rab6 conformation is not compatible with stable binding to the Ric1-GEF domain, so activated Rab6 dissociates from the GEF. This video was made in ChimeraX¹ using models generated in SWISS-MODEL² based on PDB 2FE4 (human Rab6B-GDP)³, PDB 5LEF (human RAB6A-GTP)⁴, and PDB 9AYR (the Ric1-Rgp1-Rab6 structure reported in this work).

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