



Supplementary Figure 1. Initial phase determination. Anomalous difference Fourier map (red) generated by SAD phasing to 3.2 Å resolution, displaying the anomalous scatterers at the 4 σ level in red, together with a wire representation of the Rab27b dimer. Six SeMet residues are labeled in the dimer. A ball-and-stick model of the GDP is represented and enlarged in the upper-right window. The electron-density quality surrounding the nucleotide is displayed as a σ_A -weighted $F_o - F_c$ map in green at the level of 3.0 σ level, showing no density for a possible γ -phosphate.