

## **SUPPLEMENTARY MATERIAL**

### *Gel filtration assay*

Two nmol of KuA, KuB or KuC proteins were incubated in 500  $\mu$ L of buffer G (50 mM Tris-HCl, pH 8, 250 mM NaCl) for 10 minutes at 4°C. After centrifugation at 13000 rpm, the soluble fraction was injected on a Superdex 200 10/300 GL (GE Healthcare) equilibrated with buffer G. Twenty two fractions of 500  $\mu$ L were collected, ranging from approximately 700 kDa (the void volume) to 10 kDa. To compare the elution volumes of the proteins, 5  $\mu$ L of SDS-loading buffer were added to 20  $\mu$ L of each of these fractions and loaded onto 10 % acrylamide SDS-PAGE gels. After migration, gels were stained with Coomassie blue.