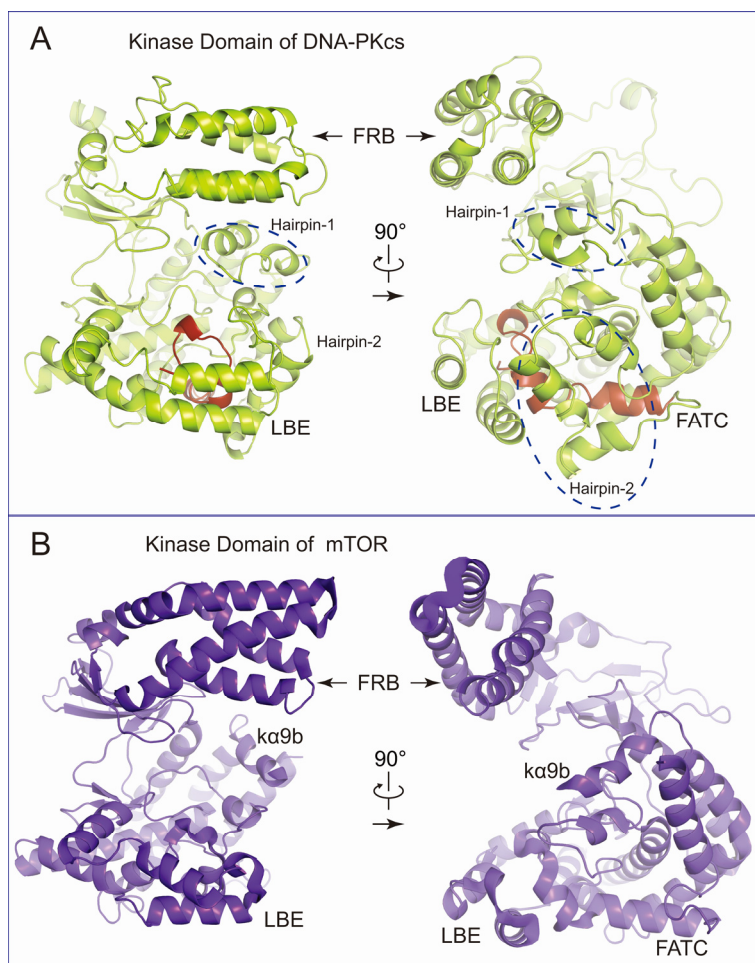


## Supplementary information, Figure S5



**Figure S5 Structural comparison of the kinase domains of DNA-PKcs and mTOR.**

Ribbon representations of the kinase domains of (A) DNA-PKcs (holo form) and (B) mTOR (PDB: 4JSN). The two kinase domains are shown in a similar orientation in two different views. Compared to mTOR, DNA-PKcs has a unique insertion (Hairpin-2), which packs against the FATC and the activation loop. In mTOR, substrate access is proposed to be restricted by helix  $\kappa\alpha 9b$  [14]. The equivalent in DNA-PKcs is Hairpin-1, which is stacked by FRB and the activation loop. FRB: FKBP12-rapamycin-binding, LBE: mLST8-binding elements.