



**Supplementary Figure 4. CMK-1 shares homology with human CaMK1's and CaMK4.** Multiple sequence alignment of *C. elegans* CMK-1 (Ce\_CMK-1) with human CaMK1 $\alpha$  (Hs\_CaMK1\_alpha), CaMK1 $\delta$  (Hs\_CaMK1\_delta), CaMK1 $\beta$  (Hs\_CaMK1\_beta), CaMK1 $\gamma$  (Hs\_CaMK1\_gamma) and CaMK4 (Hs\_CaMK4) highlighting domains and amino acids modified by phosphorylation and O-GlcNAc modification. Alignment was performed by L-INS-i MAFFT using BLOSUM62 as a scoring matrix and a gap onset penalty of 1.53.