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**A screenshot of a cell phone

Description automatically generated**

**Supplementary File 1. Alignment of Skd3 to diverse metazoan lineages shows conservation of key motifs and domains.** Alignment of Skd3 protein from diverse metazoan lineages. Alignment was constructed using Clustal Omega. Alignment shows high level of conservation of Skd3 among species. *H. sapiens*, *G. gorilla*, and *C. jacchus* Skd3 have an additional insertion in the ankyrin-repeat domain that is not conserved in the other species. This alignment was used to generate the phylogenetic tree in Figure 1B. The protozoan *M. brevicollis* Skd3 sequence was included in the alignment for reference. MTS (mitochondrial-targeting sequence, ANK (ankyrin-repeat domain), NBD (nucleotide-binding domain), and CTD (C-terminal domain).