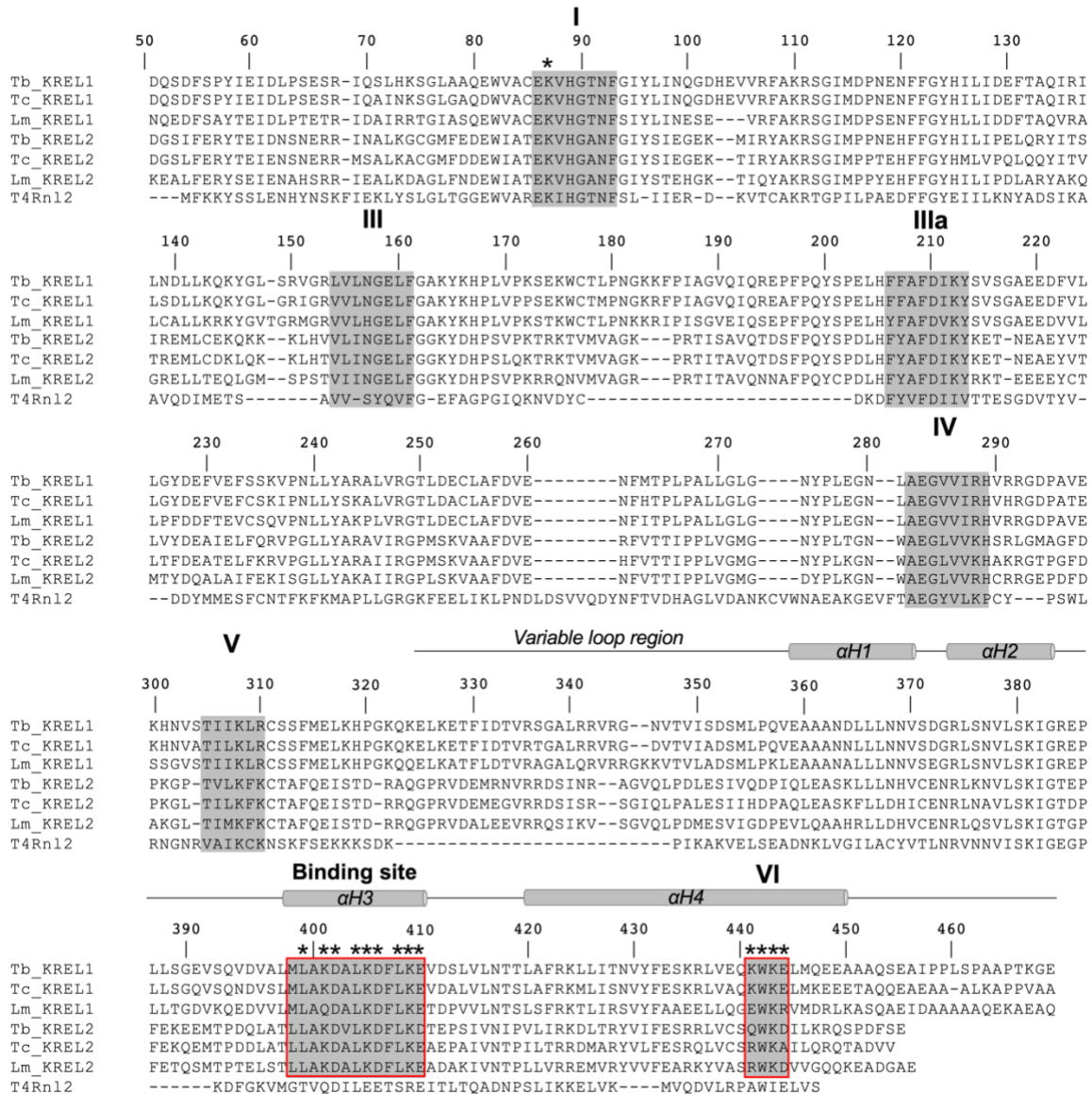




Supplemental Figure S1. Multiple sequence alignment of RNA ligases. Amino acid sequences of kinetoplastid RNA ligase 1 (KREL1) and kinetoplastid RNA ligase 2 (KREL2) from *Trypanosoma brucei* (Tb), *Trypanosoma cruzi* (Tc), and *Leishmania major* (Lm) were retrieved from the TriTryp database. Amino acid sequence T4 RNA ligase 2 (T4Rnl2) was retrieved from the UniProt database. Amino acids 1-50 of kinetoplastid ligases, which are representative of the mitochondrial import signal, were removed for this alignment. Within the alignment, motifs (I, III, IIIa, IV, V) are highlighted in grey, with the newly characterized binding site motif and motif VI outlined in red. The above asterisk represents each residue mutated for analysis.