



**Figure 5 – figure supplement 3.** Structure-based alignment of *M. mazei* casposase to *E. coli* (5vvk) and *E. faecalis* Cas1 (5xvp). The secondary structure elements on the top are for the casposase; those on the bottom correspond to those of *E. faecalis* (Xiao et al., 2017). Active site residues are marked with \*. Residues mutated in this work are shown in red. Italics indicate the region of the casposase that cannot be assigned to the electron density. Green cylinders indicate predicted a-helices at the casposase C-terminus.