



**Figure S4. Structural comparison between NocT vs NocT-M117N.** **A**, Structural comparison between the binding sites of NocT in complex with nopaline (shown as pink/limegreen stick) and pyronopaline (shown as pink/blue stick) and M117N-NocT mutant in complex with pyronopaline (shown as pink/magenta stick). Close-up view around the  $\alpha$ -KG part of the ligand; **B**, pyronopaline bound to the ligand binding site of M117N-NocT in its annealing Fo-Fc omit map contoured at  $4\sigma$ .