



Figure S1. Phylogenetic tree of 80 RDases from *Deltaproteobacteria* isolates and metagenomics in JGI with functionally characterized RDase As. The tree construction method is the same as Figure 1. The RDases in *Deltaproteobacteria* isolates are in red, which are included in Figure 1. RDases in *Deltaproteobacteria* metagenomics data are in blue, which are not included in Figure 1.