

Description of Additional Supplementary Files

File name: Supplementary Movie 1

Description: Molecular dynamics simulation a: phosphate mobility inside the catalytic center of *AtPFA-DSP1*

File name: Supplementary Movie 2

Description: Molecular dynamics simulation b: phosphate mobility inside the catalytic center of *AtPFA-DSP1*

File name: Supplementary Movie 3

Description: Molecular dynamics simulation c: phosphate mobility inside the catalytic center of *AtPFA-DSP1*

File name: Supplementary Movie 4

Description: Molecular dynamics simulation d: phosphate mobility inside the catalytic center of *AtPFA-DSP1*