

Description of Additional Supplementary Files

File name: Supplementary Data 1

Description: The 25 targets information about benchmarking dataset of Distance-AF

File name: Supplementary Data 2

Description: The performance of Distance-AF, Rosetta and AlphaLink about the benchmarking dataset

File name: Supplementary Data 3

Description: The statistics of performance about distance perturbation experiments on Distance-AF in Fig 2. b.

File name: Supplementary Data 4

Description: The statistics of performance about different number of constraints on Distance-AF in Fig 2. c.

File name: Supplementary Data 5

Description: The statistics of performance of AlphaFold 2 and Distance-AF on four targets with disordered tails, corresponding to Fig 4.

File name: Supplementary Data 6

Description: The information of five Cryo-EM targets and performance comparison of AF2, Distance-AF under six constraints and Distance-AF under three constraints.

File name: Supplementary Data 7

Description: The detailed information of four GPCR targets and performance comparison of AF2 and Distance-AF.

File name: Supplementary Data 8

Description: The detailed information of two NMR protein ensemble targets.

File name: Supplementary Data 9

Description: The intra-domain GDT-TS on native and Distance-AF models about two ensemble targets.

File name: Supplementary Data 10

Description: The standard deviation statistics on native and Distance-AF models about two ensemble targets.