



**Figure S4.** Alignment of three regions of the chrysanthemum virus R (CVR) replicase protein. Alignment was employed using ClustalW implemented in MEGA7 program. Names of isolates are presented in the left column. Numerals above the alignment indicate amino acid positions (numbering according to the CVR Chinese isolate BJ replicase, MG432107). Deletions are in blue. C-terminal fragment of 2OG-Fe(II) Oxy domain and N-terminal fragment of helicase domain are in yellow and green, respectively.