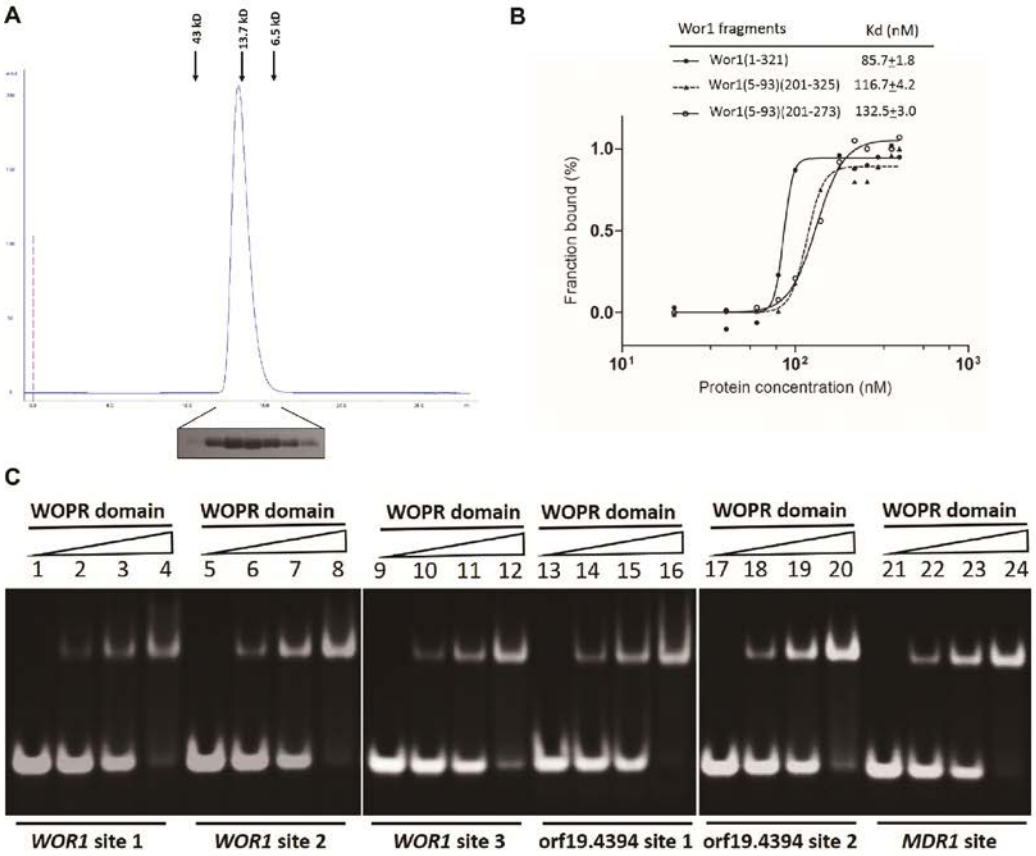
Supplementary information, Figure S2



D

Binding Site	Sequence
WOR1 site 1	gttaaaaaactctattttca
WOR1 site 2	aagaagttaaacttttttga
WOR1 site 3	ggaataattagagttttaca
MDR1 site	tacttttaaggttttgttt
orf19.4394 site 1	aaaaatttaaagttttaatta
orf19.4394 site 2	tattaccaattaaacttttat

Figure S2 Binding of the Wor1 WOPR domain with dsDNA of different sequences.

(A) Size-exclusion gel filtration purification of the CaWor1 WOPR domain (residues 5-93 and 201-273). The peak position is about 13 ml, which corresponds to the monomer of the WOPR domain with a molecular mass of about 18 kDa. The peak fractions were subjected to SDS-PAGE and stained by Commassie blue. The column used for gel

filtration is Superdex 75 (10/300, GE Healthcare). **(B)** Determination of the dissociation constants of the three constructs including the entire WOPR domain (residues 1-325), the WOPR domain with the linker deletion (residues 5-325Δ94-200), and the WOPR domain with the linker and the C-terminal region deletions (residues 5-93 and 201-273). **(C)** The binding of the WOPR domain with different dsDNA. The WOPR domain can bind effectively to the six DNA fragments in a dose-dependent manner. The 20-bp dsDNA concentration is 5 μM and the WOPR domain concentration is 0 μM (lanes 1, 5, 9, 13, 17, and 21), 2.5 μM (lanes 2, 6, 10, 14, 18, and 22), 5 μM (lanes 3, 7, 11, 15, 19, and 23), and 10 μM (lanes 4, 8, 12, 16, 20, and 24). **(D)** DNA sequences used in the binding assays. The putative binding sites are highlighted in red.