

## Supplementary information, Table S1

**Table S1 Interactions between the WOPR domain and the dsDNA**

WOPR domain	Distance (Å)	Mediation	Distance (Å)	dsDNA
<b>Hydrophilic interactions between the residues and the bases</b>				
Arg65-N <sup>η</sup>			3.4	T7'-O2
Arg65-N <sup>η</sup>			2.7	T6'-O2
Arg65-N <sup>η</sup>			3.3	A5'-N3
Arg65-N <sup>η</sup>	3.1	Wat	2.8	A6-N3
Arg65-N <sup>η</sup>	3.1	Wat	3.2	A7-N3
Ser75-O <sup>γ</sup>			2.9	C9-N4
Ser75-O <sup>γ</sup>	2.7	Wat	3.1	T10-O4
Ser75-O	3.1	Wat	3.1	T10-O4
Ser75-O	3.4	Wat	2.7	A8-N7
Ser75-O <sup>γ</sup>	3.2	Wat	2.9	A10'-N6
Ser75-O	2.7	Wat	2.9	A10'-N6
Arg76-N <sup>η</sup>	2.9	Wat	2.8	A10'-N7
Arg76-N <sup>η</sup>	3.2	Wat	2.9	A10'-N6
<b>Hydrophobic interactions between the residues and the bases</b>				
I77-C <sup>δ</sup>			4.3	T10-C7
L82-C <sup>δ</sup>			4.5	T10-C7
L82-C <sup>δ</sup>			3.8	C9-C6
<b>Hydrophilic interactions between the residues and the phosphates</b>				
Arg38-N <sup>η</sup>			3.1	A4'-phosphate
Lys64-N			2.7	A4'-phosphate
Arg65-N			2.9	A4'-phosphate
Trp66-N			2.8	A8-phosphate
Thr67-O <sup>γ</sup>			2.8	C3'-phosphate
Asp68-O <sup>δ</sup>	2.9	Wat	2.7	A7-phosphate
Asp68-N	3.0	Wat	2.7	A7-phosphate
Arg76-N <sup>η</sup>			2.9	A11'-phosphate
Tyr84-O <sup>η</sup>	2.5	Wat	2.9	A8-phosphate
Lys206-N <sup>ζ</sup>	2.8	Wat	2.7	A7-phosphate
Lys206-N <sup>ζ</sup>			3.1	A8-phosphate
Thr208-O <sup>γ</sup>	2.8	Wat	2.9	A8-phosphate
Thr208-O <sup>γ</sup>	2.7	Wat	2.8	C9-phosphate
Thr208-O	3.2	Wat	2.8	C9-phosphate
Thr210-O <sup>γ</sup>			2.7	C9-phosphate
His230-N <sup>δ</sup>	2.5	Wat	2.6	A8-phosphate