

rVSV-GP: IC <sub>50</sub> (nM)									
	<b>EBOV</b>	<b>EBOV<sub>CL</sub></b>	<b>EBOV<sup>W291R</sup></b>	<b>BDBV</b>	<b>BDBV<sub>CL</sub></b>	<b>SUDV</b>	<b>SUDV<sub>CL</sub></b>	<b>TAFV</b>	<b>RESTV</b>
<b>ADI-15946</b>	4.77	0.0059	0.20	0.82	0.0099	65.95	3.48	2.48	-
<b>VH<sup>IGL</sup></b>	4.39	0.0060	0.17	0.77	0.0106	71.77	3.52	n.d.	n.d.
<b>VL<sup>IGL</sup></b>	-	6.48	7.33	-	0.019	-	-	n.d.	n.d.
<b>VH<sup>IGL</sup>+VL<sup>IGL</sup></b>	-	12.42	14.38	-	0.62	-	-	n.d.	n.d.
<b>46M1</b>	2.07	0.012	26.98	1.92	0.0073	7.15	0.71	8.08	-
<b>46M2</b>	1.61	0.016	2.28	1.15	0.012	2.03	0.16	5.23	-
<b>46M3</b>	1.61	0.020	0.56	1.92	0.014	3.60	0.22	10.32	-

Dash = non-neutralizing

**Supplementary Table 1.** Neutralization potency (IC<sub>50</sub>) of ADI-15946 variants against rVSVs bearing filovirus glycoproteins.

Authentic Virus Neutralization			
IC <sub>50</sub> [nM]	EBOV	BDBV	SUDV
<b>ADI-15946</b>	1.46	0.11	281.40
<b>46M1</b>	2.93	0.12	47.72
<b>46M2</b>	3.09	0.24	17.57
<b>46M3</b>	4.01	0.22	17.30

**Supplementary Table 2.** Neutralization potency (IC<sub>50</sub>) of ADI-15946 variants against authentic filoviruses.

	KD (M)	KD Error	kon(1/Ms)	kon Error	kdis(1/s)	kdis Error
<b>Binding of ADI-15946 and its variants to EBOV GP full length at pH 7.5</b>						
WT	8.17E-09	6.27E-11	4.77E+04	2.79E+02	3.89E-04	1.93E-06
HC <sup>IGL</sup>	7.33E-09	1.02E-10	4.84E+04	4.90E+02	3.55E-04	3.41E-06
LC <sup>IGL</sup>	3.89E-08	3.55E-10	1.23E+04	9.47E+01	4.79E-04	2.36E-06
HC <sup>IGL</sup> +LC <sup>IGL</sup>	7.06E-08	4.20E-09	8.12E+03	4.79E+02	5.73E-04	4.25E-06
<b>Binding of ADI-15946 and its variants to EBOV GP cleaved at pH 5.5</b>						
WT	<1.0E-12	<1.0E-12	2.21E+06	1.22E+04	<1.0E-07	
HC <sup>IGL</sup>	4.59E-12	<1.0E-12	2.20E+06	8.82E+03	1.01E-05	1.62E-06
LC <sup>IGL</sup>	3.59E-11	<1.0E-12	2.24E+06	1.42E+04	8.04E-05	2.09E-06
HC <sup>IGL</sup> +LC <sup>IGL</sup>	1.07E-11	1.08E-12	2.14E+06	1.46E+04	2.29E-05	2.31E-06

**Supplementary Table 3.** Binding kinetics of ADI-15946 compared to inferred germline progenitors.