

**Table S3: Temperature-dependent DNA binding constants of RovA.**

Site	Temperature	Binding constant [nM]		Hill coefficient	RSS
activating	25°C	$k_a$	6.01	2	0.053
<b>activating</b>	<b>25°C</b>	<b><math>k_a</math></b>	<b>6.09</b>	<b>3</b>	<b>0.030</b>
activating	37°C	$k_a$	10.69	2	0.093
<b>activating</b>	<b>25°C</b>	<b><math>k_a</math></b>	<b>10.23</b>	<b>3</b>	<b>0.018</b>
<b>repressive</b>	<b>25°C</b>	<b><math>k_r</math></b>	<b>12.22</b>	<b>2</b>	<b>0.048</b>
repressive	25°C	$k_r$	11.45	3	0.167
<b>repressive</b>	<b>37°C</b>	<b><math>k_r</math></b>	<b>42.67</b>	<b>2</b>	<b>0.045</b>
repressive	37°C	$k_r$	40.69	3	0.017

Calculated DNA binding constants for the activating and repressive RovA binding site at 25°C and 37°C with open and fixed Hill coefficients.