

**S1 Table.** Michaelis-Menten kinetic parameters for TEM  $\beta$ -lactamase variants with and without compounds 1, 2 and 3

	no compound			+ 100 $\mu$ M compound			% modulation of $k_{cat}/K_m$
	$k_{cat}^*$ ( $s^{-1}$ )	$K_m^*$ ( $\mu$ M)	$k_{cat}/K_m$ ( $\mu$ M $^{-1}$ s $^{-1}$ )	$k_{cat}$ ( $s^{-1}$ )	$K_m$ ( $\mu$ M)	$k_{cat}/K_m$ ( $\mu$ M $^{-1}$ s $^{-1}$ )	
<b>TEM</b>	295 $\pm$ 7	53 $\pm$ 3	5.6 $\pm$ 0.1	527 $\pm$ 8	62 $\pm$ 2	8.5 $\pm$ 0.1	+52%
<b>L220N</b>	4.6 $\pm$ 0.6	157 $\pm$ 29	3.0 $\times$ 10 $^{-2}$ $\pm$ 0.2	5.2 $\pm$ 0.3	183 $\pm$ 17	3.0 $\times$ 10 $^{-2}$ $\pm$ 0.1	0%
<b>TEM</b>	295 $\pm$ 7	53 $\pm$ 3	5.6 $\pm$ 0.1	334 $\pm$ 5	43 $\pm$ 2	7.8 $\pm$ 0.0	+39%
<b>T265V</b>	323 $\pm$ 10	57 $\pm$ 4	5.7 $\pm$ 0.1	307 $\pm$ 17	47 $\pm$ 7	6.6 $\pm$ 0.2	+16%
<b>TEM</b>	295 $\pm$ 7	53 $\pm$ 3	5.6 $\pm$ 0.1	256 $\pm$ 28	110 $\pm$ 24	2.3 $\pm$ 0.3	-59%
<b>R244S</b>	ND $^\dagger$	ND $^\dagger$	0.3 $\pm$ 0.0	ND $^\dagger$	ND $^\dagger$	0.3 $\pm$ 0.0	0%

\*Errors are standard errors of the fit.

$^\dagger$ Not determined. Michaelis-Menten curve did not saturate.  $k_{cat}/K_m$  was determined by a linear fit.