

**Table S4.** Results of varying stirrer speed and aeration rate for determining the  $K_{La}$  value.

Trial number	Stirrer speed (rpm)	volume of air per volume of medium per minute (vvm)	Aeration rate (SL/h)	$K_{La}$ value (h <sup>-1</sup> )
1	300	1.5	240	$30.47 \pm 3.39$
2	200	1.5	240	$19.41 \pm 3.13$
3	100	1.5	240	$10.69 \pm 1.91$
4	300	1.0	160	$28.36 \pm 3.40$
5	200	1.0	160	$16.05 \pm 3.67$
6	100	1.0	160	$8.68 \pm 1.97$
7	300	0.5	80	$25.45 \pm 3.12$
8	200	0.5	80	$11.05 \pm 1.76$
9	100	0.5	80	$5.94 \pm 0.75$