

Supplementary material:

Table 1: Enzyme kinetics of glk A

S.NO	Source of glk A	Enzyme Activity ($\mu\text{M}/\mu\text{g}/\text{ml}$)	V_{max} ($\mu\text{M}/\text{ml}/\text{min}$)	K_m (μM)	Hill Coefficient $S_{0.5}$ (mM)
1	Cytosolic fraction of <i>S. aureus</i> ATCC12600	0.1053 \pm 0.01	2.24 \pm 0.06	5.22 \pm 0.17	1.71 \pm 0.025
2	rglk A	0.20817 \pm 0.04	2.19 \pm 0.05	5.1 \pm 0.06	1.66 \pm 0.032

Values are the mean \pm SD from three determinations

Table 2: Enzyme kinetics comparison of *S. aureus* glk A with other bacterial and human glk A

S.NO	Source of glk A	K_m	References
1	<i>E. coli</i> K-12	0.78mM	[16]
2	<i>Ranibacterium salmoninarum</i>	0.266mM	[17]
3	<i>Bacillus subtilis</i>	0.24mM	[18]
4	<i>Bacillus sphaericus</i>	0.31mM	[19]
5	Human	7.234mM	[20]
6	<i>S. aureus</i>	5.22 mM	In the present study