

## Supplementary material:

**Table 1:** RMSD matrix showing the values generated from super imposition of kinase domains of HKs by MATRAS tool. The values are the determinants of identity among kinase domains of four HKs.

HK1	<b>0.000</b>	<b>0.588</b>	<b>0.674</b>	<b>0.650</b>
HK2	<b>0.588</b>	<b>0.000</b>	<b>0.233</b>	<b>0.520</b>
HK3	<b>0.674</b>	<b>0.233</b>	<b>0.000</b>	<b>0.561</b>
HK4	<b>0.650</b>	<b>0.520</b>	<b>0.561</b>	<b>0.000</b>

**Table 2:** Molecular docking of ATP into the kinase domains of HKs

Hexokinase	Docking score	No. of H-Bonds	Interacting residues	H-bond length (Å)
HK1	-12.417	6	G170	2.6
			K621	3.0
			S682	2.8
			S682	2.8
			S682	2.9
			E742	2.9
HK2	-12.2306	3	H504	2.4
			Q608	2.8
			N609	2.5
HK3	-12.6445	5	T626	2.2
			R520	3.0
			L623	2.7
			N624	2.6
			N624	2.9
HK4	-13.1834	2	H156	1.8
			E157	2.5