



**Supplementary Figure 1.** Time course of aspartate uptake in proteoliposomes with reconstituted Glt<sub>TK</sub>.  $v_{\max}$  conditions were used (300 mM Na<sup>+</sup> and 100  $\mu$ M L-Aspartate). The experiment was done in triplicate with the error representing the standard deviation. From this result we concluded that the transport rate is constant over the first 30 seconds of the experiment.