



Supplemental Fig. S1 The minimum dose of pyruvate administration to affect cognitive and physical functions. * $p < 0.05$, ** $p < 0.01$, * $p < 0.001$ vs Vehicle**

Fig.S1A Changes of total distance traveled in different dose of pyruvate administration

Fig. S1B Changes of escape latency in different dose of pyruvate administration

Fig. S1C Changes of swimming time in different dose of pyruvate administration