



**Figure S5. Inhibition of L-iLDH by oxalate and oxamate.** Purified L-iLDH ( $0.1 \mu\text{g}$ ) was incubated in the reaction mixture contained  $0.2 \text{ mM}$  MTT and  $50 \text{ mM}$  Tris-HCl ( $\text{pH}$  7.5) at  $30^\circ\text{C}$ . (a) The reaction was started with different L-lactate concentrations at variable oxalate concentrations.  $\blacksquare$ , no oxalate;  $\bullet$ ,  $1.25 \text{ mM}$  oxalate;  $\blacktriangle$ ,  $2.5 \text{ mM}$  oxalate;  $\blacktriangledown$ ,  $3.75 \text{ mM}$  oxalate;  $\blacktriangleleft$ ,  $5 \text{ mM}$  oxalate. (b) The reaction was started with different L-lactate concentrations at variable oxamate concentrations.  $\blacksquare$ , no oxamate;  $\bullet$ ,  $2.5 \text{ mM}$  oxamate;  $\blacktriangle$ ,  $5 \text{ mM}$  oxamate;  $\blacktriangledown$ ,  $20 \text{ mM}$  oxamate;  $\blacktriangleleft$ ,  $31.25 \text{ mM}$  oxamate. The patterns of double-reciprocal plots indicate a competitive inhibition for both chemicals. The  $K_i$  values of oxalate and oxamate were estimated to be  $1.9 \pm 0.1 \text{ mM}$  and  $29 \pm 1.7 \text{ mM}$ , respectively. The dispersion values indicate the SEM of the linear regression analysis of one experiment.