Information

Part 2: Yeast cells were suspended in 100 mM phosphate buffer, pH 6.8, to a cell density of 10% wet weight. At time 0, 4 mM DiOC2(3) were added to the suspension. At times ~90 s and 120 s, 30 mM glucose and 5 mM KCN were added to the suspension, respectively to initiate oscillations.

Fig2: (control) Time-resolved NADH fluorescence and ATP concentration. Fs=1 Hz.

Fig3: effect of azide on the oscillations of ATP concentrations. Fs =1Hz. 2mM sodium azide were added to the suspension of yeast cells before addition of 30mM glucose and 5mM KCN.

Fig4: Effect of iodoacetate on the dynamics of NADH and intracellular ATP in yeast cells with an oscillating glycolysis. At t=1000 sec, 20 mM Iodoacetate was added to the cell suspension. Fs =1 Hz.

Fig5: Effect of 2-DG on the dynamics of NADH and intracellular ATP following addition of glucose and KCN to a suspension of yeast cells. The cells were incubated with 5 mM 2-DG for 10 min before addition of 30 mM glucose and 5mM KCN. fs =1 Hz.

Fig6: Effect of 2-DG on intracellular ATP. After 10 min 30 mM 2-dexoyglucose was added to the suspension. Fs =1Hz.

Fig7: Effect of 2-DG on the activity of PMA1. Cells were incubated in the absence and in the presence of 5 mM 2-DG. Fs= 0.5 Hz.