

细胞呼吸化学历程 (立体异构问题请忽略)

有(无)氧呼吸第一阶段(糖酵解)

[细胞质基质]

II. 糖原/淀粉

Glycogen Starch

(C₆H₁₀O₅)_n

糖原/淀粉磷酸化酶

Pi

1-磷酸葡萄糖

-Glucose-1-Phosphate

6-磷酸葡萄糖

Glucose-6-Phosphate

葡萄糖 I.

葡萄糖

果糖 V.

果糖

1,6-二磷酸果糖

Fructose-1,6-diphosphate

3-磷酸甘油醛

3-phosphoglyceroldehyde

3-磷酸甘油

3-Phosphoglycerate

2-磷酸甘油

2-Phosphoglycerate

1,3-二磷酸甘油

1,3-Diphosphoglycerate

2-磷酸甘油

2-Phosphoglycerate

2-磷酸甘油

2-Phosphoglycerate

2-磷酸甘油

2-Phosphoglycerate

2-磷酸甘油

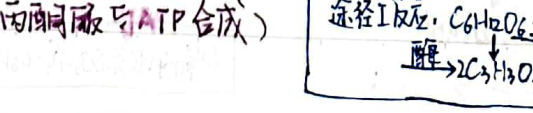
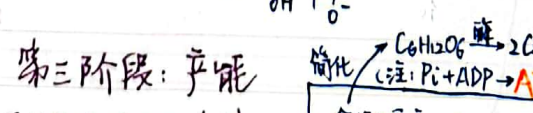
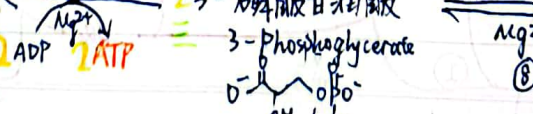
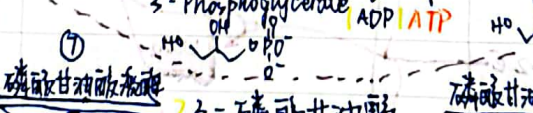
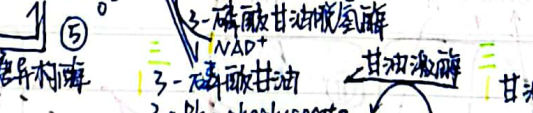
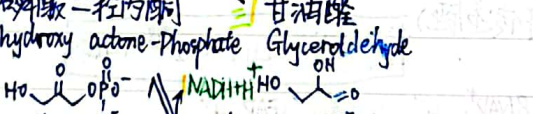
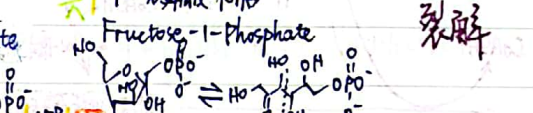
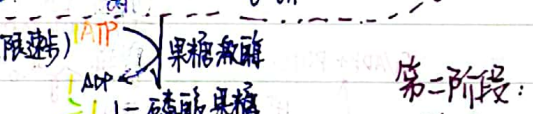
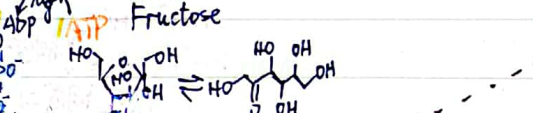
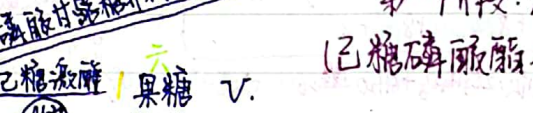
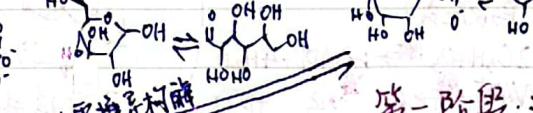
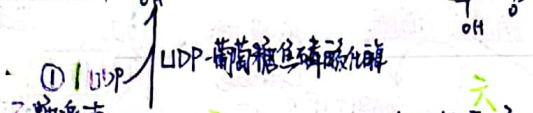
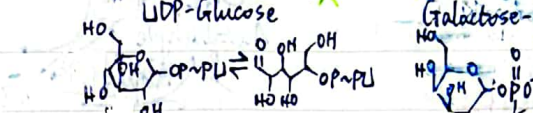
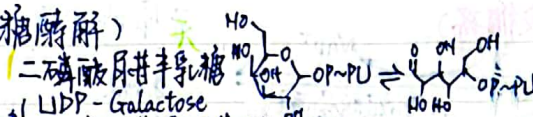
2-Phosphoglycerate

2-磷酸甘油

2-Phosphoglycerate

2-磷酸甘油

2-Phosphoglycerate



第一阶段: 活化
(己糖磷酸形成)

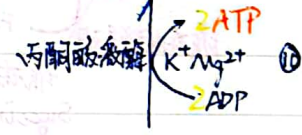
第二阶段:
裂解

(丙糖磷酸形成)

无氧呼吸第二阶段

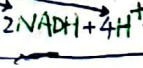
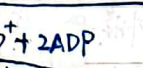
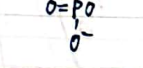
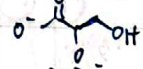
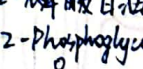
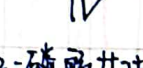
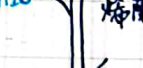
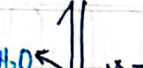
三2 丙酮酸 → 三羧酸循环

Pyruvate

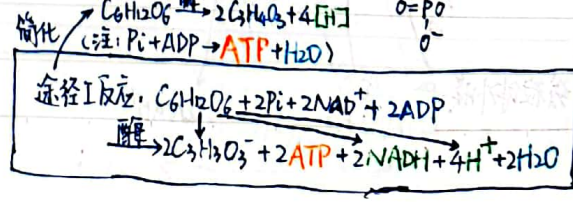


三2 磷酸烯醇式丙酮酸

Phosphoenolpyruvate



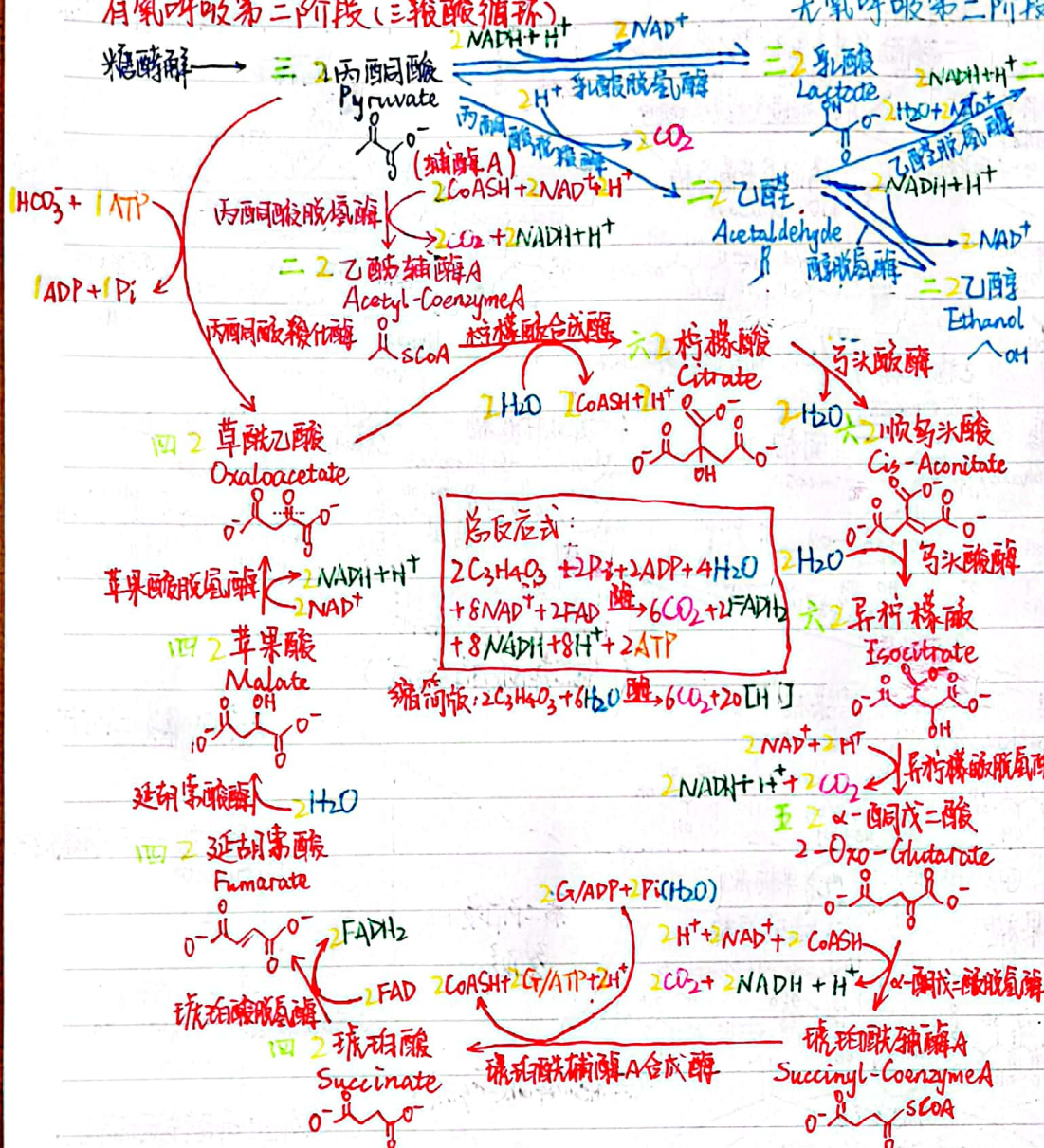
第三阶段: 产能
(丙酮酸与ATP合成)



扫描全能王 创建

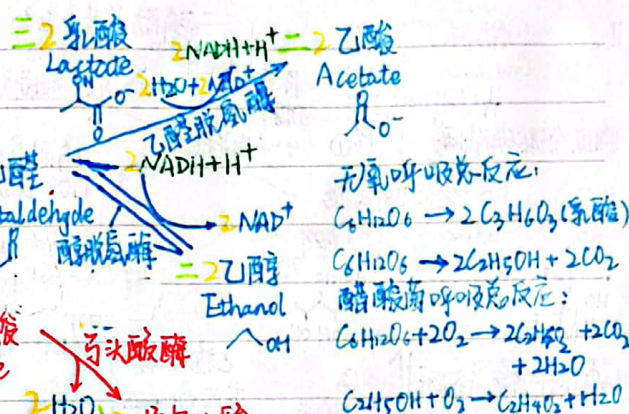
[线粒体基质]

有氧呼吸第二阶段(三羧酸循环)



[细胞质基质]

无氧呼吸第二阶段(消耗还原氢)



有氧呼吸第三阶段(电子传递链)

