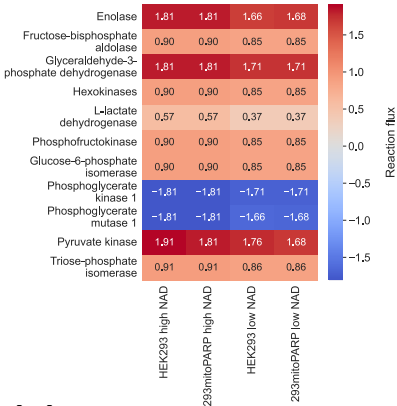
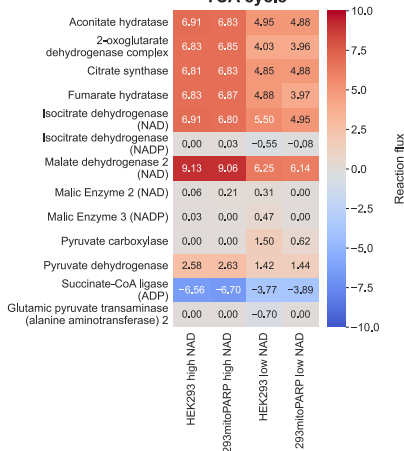


(a)

**Glycolysis / gluconeogenesis**

(b)

**TCA cycle**

(c)

**Malate aspartate shuttle**