

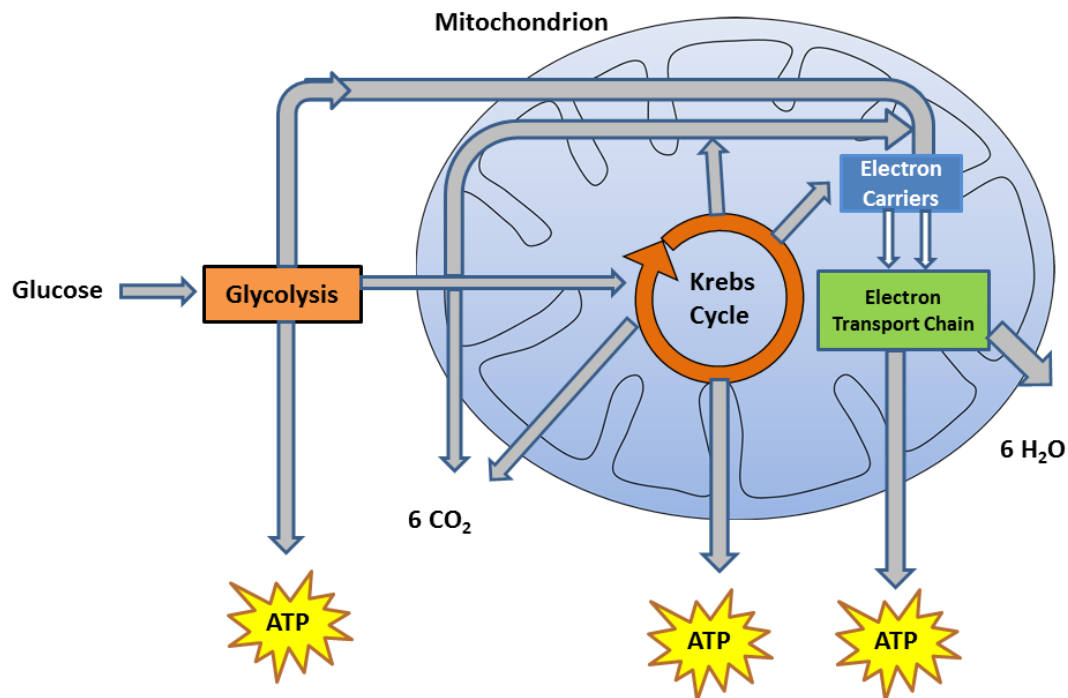
Introduction

FADETC_RBF: A webserver for the prediction of FAD binding sites in electron transport protein from QuickRBF classifier. FADETC_RBF is a web-server specially trained for the identification of flavin adenosine dinucleotide (FAD) in electron transport proteins. In this figure we tried to show the structure for a FAD binding sites and electron transport protein



Cellular respiration is a catabolic pathway for producing adenosine triphosphate (ATP) and is the most efficient process through which cells harvest energy from consumed food. When cells undergo cellular respiration, they require a pathway to store and transport electrons (i.e., the

electron transport chain). The electron transport chain produces a transmembrane proton electrochemical gradient because of oxidation-reduction reactions. If protons flow back through the membrane, ATP synthase converts this mechanical energy into chemical energy by producing ATP, which provides energy in many cellular processes. In the electron transport chain process, flavin adenine dinucleotide (FAD) is one of the most vital molecules for carrying and transferring electrons. Therefore, predicting FAD binding sites in the electron transport chain is vital for helping biologists understand the electron transport chain process and energy production in cells.



This web server is vital in helping biologists clearly understand the operating mechanisms of electron transport chains and Complex II.