

Complex IV Activity Assay Kit

Product Information

Cat.No.

Kit-1976

Size

96 wells

Description

Complex IV (cytochrome c oxidase) is the terminal electron acceptor in the mitochondrial electron transport chain. Complex IV functions by oxidizing cytochrome c and completing a four electron reduction of oxygen (O₂) to form water. During this process, two H⁺ are translocated from the mitochondrial matrix to the intermembrane space, contributing the mitochondrial membrane potential required for ATP synthesis. Common inhibitors of complex IV include potassium cyanide, azide, O₂ limitation, nitric oxide, and carbon monoxide. The Complex IV Activity Assay is designed to measure the direct oxidation of cytochrome c by complex IV, in an isolated bovine heart mitochondrial system that is supplied within the kit. For the use of this kit with other types of tissue mitochondria, please see The Mitochondrial (Tissue) Isolation Kit.

Storage

-80°C

Kit Components

Mitochondrial Complex IV Activity Assay Buffer: 2 vials/10 ml; -20°C Reduced Cytochrome c Assay Reagent: 1 vial/6 mg; -80°C Bovine Heart Mitochondria Assay Reagent: 1 vial/100 µl; -80°C Half Volume 96-Well Clear Plate: 1 plate; RT