

**TECHNICAL DATA SHEET****Catalog # MS441****Complex IV Human Enzyme Activity Microplate Assay Kit**

Rev.2

LOT #:

APPLICATIONS: Quantitative analysis of Human Complex IV activity

SPECIES CROSS-REACTIVITY: human, bovine

KIT COMPONENTS:

Item	MS441
Tube 1 (Buffer)	10 mL
Detergent	1 mL
Reagent C (Cytochrome <i>c</i> )	1 mL
96-well microplate (12 strips)	1

STORAGE CONDITIONS:

- Store Tube 1, detergent, and microplate at 4°C – DO NOT FREEZE.
- Store Reagent C at -20°C or at -80°C for long-term storage.

COUNTRY OF ORIGIN: USA

**BACKGROUND:**

Complex IV, also called cytochrome *c* oxidoreductase or cytochrome *c* oxidase, is a complex of 13 different subunits, three of which (I, II and III) are encoded on mitochondrial DNA and the remainder in the nuclear DNA. The complex contains two heme groups (*a* and *a*<sub>3</sub>) and two copper atoms as prosthetic groups. Genetic alterations of this enzyme complex are a common cause of OXPHOS diseases and the enzyme is altered in patients with Alzheimer's disease. Also, there are reports of reduced amounts of this complex in hypoxic cancer cells.

**Note: This product is for research purposes only. It is not to be used in humans or for diagnostic purposes.**

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