

## ubiquinol oxidase (H<sup>+</sup>-transporting)

Cat. No. EXWM-0476

Lot. No. (See product label)

### Introduction

**Description** Contains a dinuclear centre comprising two hemes, or heme and copper. This terminal oxidase enzyme generates proton motive force by two mechanisms: (1) transmembrane charge separation resulting from utilizing protons and electrons originating from opposite sides of the membrane to generate water, and (2) active pumping of protons across the membrane. The bioenergetic efficiency (the number of charges driven across the membrane per electron used to reduce oxygen to water) depends on the enzyme; for example, for the bo3 oxidase it is 2, while for the bd-II oxidase it is 1. cf. EC 1.10.3.14, ubiquinol oxidase (electrogenic, non H<sup>+</sup>-transporting).

**Synonyms** cytochrome bb3 oxidase; cytochrome bo oxidase; cytochrome bd-II oxidase; ubiquinol:O<sub>2</sub> oxidoreductase (H<sup>+</sup>-transporting)

### Product Information

**Form** Liquid or lyophilized powder

**EC Number** EC 7.1.1.3 (Formerly EC 1.10.3.10)

**Reaction**  $2 \text{ ubiquinol} + \text{O}_2 + n \text{ H}^+[\text{side 1}] = 2 \text{ ubiquinone} + 2 \text{ H}_2\text{O} + n \text{ H}^+[\text{side 2}]$

**Notes** This item requires custom production and lead time is between 5-9 weeks. We can custom produce according to your specifications.

### Storage and Shipping Information

**Storage** Store it at +4 °C for short term. For long term storage, store it at -20 °C~-80 °C.