

Sulfite oxidase from *H. sapiens*, Recombinant

Cat. No. NATE-1229

Lot. No. (See product label)

Introduction

Description Sulfite oxidase (EC 1.8.3.1) is an enzyme in the mitochondria of all eukaryotes.[citation needed] It oxidizes sulfite to sulfate and, via cytochrome c, transfers the electrons produced to the electron transport chain, allowing generation of ATP in oxidative phosphorylation. This is the last step in the metabolism of sulfur-containing compounds and the sulfate is excreted. Sulfite oxidase is a metallo-enzyme that utilizes a molybdopterin cofactor and a heme group. It is one of the cytochromes b5 and belongs to the enzyme super-family of molybdenum oxotransferases that also includes DMSO reductase, xanthine oxidase, and nitrite reductase.

Synonyms sulfite oxidase; EC 1.8.3.1; 9029-38-3

Product Information

Species *H. sapiens*

Source *E. coli*

Form Supplied in 3.2 M ammonium sulphate

EC Number EC 1.8.3.1

CAS No. 9029-38-3

Molecular Weight approx. 50000 Da

Purity >95 % as judged by SDS-PAGE

Activity 0.5 U/mg

Concentration 1.0 U/ml

Optimum pH 8.5

Optimum temperature 25°C

Unit Definition One unit is defined as the amount of enzyme required to oxidize 1.0µmol of sulfite to sulfate, per min, in a coupled assay where the hydrogen peroxide formed in the first reaction is reduced by an NADH-peroxidase in the presence of NADH, at 25 °C and pH 8.5.

Usage and Packaging

Preparation Instructions Agitate vial sufficiently to fully homogenise enzyme precipitate before use.

Storage and Shipping Information

Storage Store at 4°C (shipped at room temperature)