

persulfide dioxygenase

Cat. No. EXWM-0537

Lot. No. (See product label)

Introduction

Description

An iron protein. Perthiols, formed spontaneously by interactions between thiols and elemental sulfur or sulfide, are the only acceptable substrate to the enzyme. The sulfite that is formed by the enzyme can be further converted into sulfate, thiosulfate or S-sulfogluthathione (GSSO₃-) non-enzymically.

Synonyms

sulfur oxygenase (incorrect); sulfur:oxygen oxidoreductase (incorrect); sulfur dioxygenase (incorrect)

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 1.13.11.18

CAS No.

37256-58-9

Reaction

S-sulfanylgutathione + O₂ + H₂O = glutathione + sulfite + 2 H⁺ (overall reaction);
(1a) S-sulfanylgutathione + O₂ = S-sulfinatogutathione + H⁺; (1b) S-sulfinatogutathione + H₂O = glutathione + sulfite + H⁺ (spontaneous)

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.