

## 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 (GSSO<sub>3</sub>-) 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 + O<sub>2</sub> + H<sub>2</sub>O = glutathione + sulfite + 2 H<sup>+</sup> (overall reaction); (1a) S-sulfanylgutathione + O<sub>2</sub> = S-sulfinatoglutathione + H<sup>+</sup>; (1b) S-sulfinatoglutathione + H<sub>2</sub>O = glutathione + sulfite + H<sup>+</sup> (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.