

Recombinant *Acidianus ambivalens* Sulfur oxygenase/reductase

Cat. No. EXWM-0574

Lot. No. (See product label)

Introduction

Description This enzyme, which is found in thermophilic microorganisms, contains one mononuclear non-heme iron centre per subunit. Elemental sulfur is both the electron donor and one of the two known acceptors, the other being oxygen. Thiosulfate is also observed as a product, but is likely formed non-enzymically by a reaction between sulfite and sulfur. This enzyme differs from EC 1.13.11.18, sulfur dioxygenase and EC 1.12.98.4, sulfhydrogenase, in that both activities occur simultaneously.

Product Information

Species *Acidianus ambivalens*

Source E.coli

Form Liquid or Lyophilized powder

EC Number EC 1.13.11.55

CAS No. 120598-92-7

Molecular Weight 35.3kDa

Purity Greater than 85% as determined by SDS-PAGE.

Activity Not detected

Reaction $4 \text{ sulfur} + 4 \text{ H}_2\text{O} + \text{O}_2 = 2 \text{ hydrogen sulfide} + 2 \text{ sulfite}$

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 at -20°C/-80°C upon receipt, aliquoting is necessary for multiple use. Avoid repeated freeze-thaw cycles.