Creative Enzymes®

Free Methionine-(R)-Sulfoxide Reductase from E. coli, recombinant

Cat. No. NATE-1693

Lot. No. (See product label)

Introduction

Description The Free Methionine-(R)-Sulfoxide Reductase (fRMsr) reduces free methionine sulfoxide (Met(O)) to methionine using thiol-disulfide exchange chemistry. This enzyme is involved in oxidative defense and known to form a sulfenic acid intermediate at the active site Cys during the course of turnover. In this variant, all Cys other than the peroxide-sensitive Cys have been removed by mutagenesis in order to stabilize the active site sulfenic acid with respect to disulfide bond formation.

Applications Free Methionine-(R)-Sulfoxide Reductase (C84S, C94S), or fRMsr, can be selectively derivatized at a single Cys residue with a variety of Cys-SOH specific probes and be used as a positive control.

Product Information

Source	E. coli
Form	Liquid
EC Number	EC 1.8.4.14
Molecular Weight	18,752 Da
Purity	>98% by SDS-PAGE
Concentration	10mg/mL
pH Stability	5.5-8.0
Buffer	20mM Hepes pH 7.5, 100mM NaCl

Storage and Shipping Information

Storage at -80 °C