Creative Enzymes®

Taurine Dioxygenase from E. coli, Recombinant

Cat. No. NATE-1648

Lot. No. (See product label)

Introduction

Description	Taurine dioxygenase (TauD) is a Fe(II) and α-ketoglutaric acid dependent dioxygenase, which enables E.coli to use taurine as a sulfur source. The oligomeric state of the enzyme from E.coli is reported both as a dimer and tetramer. It contains a 2-His, 1-carboxylate facial triad, which is present in most members of the family of Fe(II)/α-KG-dependent enzymes. TauD catalyzes the conversion of the amino acid taurine (2-aminoethane-1-sulfonic acid) to sulfite and aminoacetaldehyde.
Synonyms	TauD; 2-aminoethanesulfonate dioxygenase; Sulfate starvation-induced protein 3; SSI3; alpha-ketoglutarate-dependent taurine dioxygenase

Product Information

Source	E. coli
Form	Liquid
Formulation	0.5 mg/ml in 20 mM Tris-HCl buffer (pH 8.0) containing 100 mM NaCl, 1 mM DTT, 2 mM EDTA and 40% glycerol.
EC Number	EC 1.14.11.17
Molecular Weight	34.3 kDa, His tagged
Purity	> 90% by SDS-PAGE
Activity	>170 mU/mg
Concentration	2 mg/ml
Unit Definition	One unit is the amount of enzyme that converts 1 μmole of taurine to sulfite per minute at pH 6.9 at 30 °C.

Storage and Shipping Information

Storage	Aliquot and store at -20°C. Avoid repeated freeze-thaw cycles.