

## 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  $\alpha$ -ketoglutaric aciddependent 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)/ $\alpha$ -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

<b>Source</b>	E. coli
<b>Form</b>	Liquid
<b>Formulation</b>	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.
<b>EC Number</b>	EC 1.14.11.17
<b>Molecular Weight</b>	34.3 kDa, His tagged
<b>Purity</b>	> 90% by SDS-PAGE
<b>Activity</b>	>170 mU/mg
<b>Concentration</b>	2 mg/ml
<b>Unit Definition</b>	One unit is the amount of enzyme that converts 1 $\mu$ mole 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.