

## Native Sheep Cyclooxygenase 1

Cat. No. NATE-0149

Lot. No. (See product label)

### Introduction

**Description** COX-1 catalyzes the conversion of arachidonic acid to prostaglandin H<sub>2</sub> (the first step in the biosynthesis of prostaglandins, thromboxanes, and prostacyclins). It is involved in the homeostatic role of eicosanoids and constitutively almost all animal tissues. Has an apparent K<sub>M</sub> of 8.3 μM for arachidonic acid.

**Synonyms** COX-1; Constitutive cyclooxygenase; Prostaglandin H synthase 1; Prostaglandin endoperoxide synthase; EC 1.14.99.1; prostaglandin synthase; prostaglandin G/H synthase; (PG)H synthase; PG synthetase; prostaglandin synthetase; fatty acid cyclooxygenase; prostaglandin endoperoxide synthetase

### Product Information

**Source** Sheep

**Form** aqueous solution. Solution in 80 mM Tris-HCl, pH 8, with 0.1% TWEEN 20 and 300 μM diethyldithiocarbamate.

**EC Number** EC 1.14.99.1

**CAS No.** 9055-65-6

**Molecular Weight** dimer subunit mol wt 70 kDa

**Purity** > 95% (SDS-PAGE),

**Activity** > 40,000 units/mg protein

**Pathway** Alzheimer's disease, organism-specific biosystem; Cytochrome c oxidase, organism-specific biosystem; Huntington's disease, conserved biosystem

**Unit Definition** One unit consumes one nanomole of oxygen per minute at 37°C in 0.1 M Tris-HCl buffer, pH 8, containing 100 μM arachidonate, 5 mM EDTA, 2 mM phenol, and 1 μM hematin.

### Storage and Shipping Information

**Storage** -70°C