

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 H₂ (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_M 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