

Cyclooxygenase 1 from Human, Recombinant

Cat. No. NATE-1237

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

Species

Human

Source

Sf21 cells

Form

80 mM Tris, pH 8.0, containing 0.1% polysorbate 20, 300 μM DDC, and 10% glycerol

Molecular Weight

~70 kDa

Activity

>20,000 units/mg

Unit Definition

One unit is defined as the amount of enzyme required to consume 1 nmol of oxygen per minute at 37°C in 100 mM Tris, pH 8.0, containing 100 μM arachidonate, 5 mM EDTA, 2 mM phenol, and 1 μM hematin.

Storage and Shipping Information

Storage

-80°C (as supplied); avoid freeze/thaw cycles by aliquoting protein

Stability

> 6 months