

## 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 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

**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