

Active Recombinant Human PTGS2 2N580A Mutant Protein, His-tagged

Cat. No. PTGS2-01H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active recombinant N-terminal His-tagged COX-2N580A mutant (20-604) purified from insect cells.
Species	Human
Source	Insect Cells
Description	Prostaglandin-endoperoxide synthase (PTGS), also known as cyclooxygenase, is the key enzyme in prostaglandin biosynthesis, and acts both as a dioxygenase and as a peroxidase. There are two isozymes of PTGS: a constitutive PTGS1 and an inducible PTGS2, which differ in their regulation of expression and tissue distribution. This gene encodes the inducible isozyme. It is regulated by specific stimulatory events, suggesting that it is responsible for the prostanoid biosynthesis involved in inflammation and mitogenesis.
Bio-activity	>8000 U/mg
Molecular Mass	67.9 kDa
Purity	≥ 75% (estimated by SDS-PAGE)
Unit Definition	One unit of enzyme consumes one nanomole of oxygen per minute at 37 centigrade in 0.1 M Tris-HCl buffer, pH 8.0, containing 100 µM arachidonate, 5 mM EDTA, 2 mM phenol, and 1

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μM hematin. The cyclooxygenase activity of COX-2 was measured at 37 centigrade by monitoring oxygen consumption using a Glison Model 5/6 H oxygraph equipped with a Clark oxygen electrode.

Stability

≥ 1 year

Storage

At -80 centigrade.

Storage Buffer

80 mM Tris, pH 8.0, with 0.3 mM DDC, 0.01% Tween 20, and 10% glycerol

Shipping

Dry ice in continental US; may vary elsewhere

GENE INFORMATION

Gene Name

PTGS2 prostaglandin-endoperoxide synthase 2 [Homo sapiens (human)]

Official Symbol

PTGS2

Synonyms

PTGS2; prostaglandin-endoperoxide synthase 2; COX2; COX-2; PHS-2; PGG/HS; PGHS-2; hCox-2; GRIPGHS; prostaglandin G/H synthase 2; PGH synthase 2; PHS II; cyclooxygenase 2; cyclooxygenase 2b; prostaglandin H2 synthase 2; prostaglandin-endoperoxide synthase 2 (prostaglandin G/H synthase and cyclooxygenase); EC 1.14.99.1

Gene ID

5743

mRNA Refseq

NM_000963

Protein Refseq

NP_000954

MIM

600262

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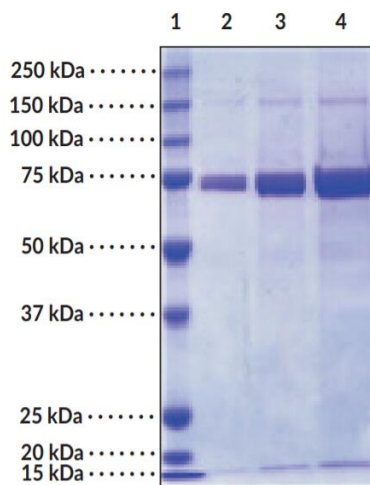
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UniProt ID

P35354

SDS-PAGE



Lane 1: MW Markers

Lane 2: COX-2 (2 µg)

Lane 3: COX-2 (5 µg)

Lane 4: COX-2 (10 µg)

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