

## Active Recombinant Human PTGS2 protein, His-tagged

Cat. No. PTGS2-30H Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant Human PTGS2 fused with His tag at N-terminal was expressed in Insect cells.
<b>Species</b>	Human
<b>Source</b>	Insect Cells
<b>Description</b>	COX-2 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 the inducible form of cyclooxygenase, induced by phorbol esters, lipopolysaccharides, and cytokines. COX-2 is upregulated in the neovasculature of malignant tumors. Inhibition of COX-2 with nonsteroidal anti-inflammatory drugs (NSAIDs) is associated with decreased tumor growth.
<b>Form</b>	Solution in 80 mM Tris-HCl, pH 8.0 with 0.1% TWEEN® 20 and 300 µM diethyldithiocarbamate and 10% glycerol.
<b>Bio-activity</b>	> 8000 units/mg
<b>Molecular Mass</b>	dimer subunit mol wt 70-74 kDa
<b>Purity</b>	>70% (SDS-PAGE)
<b>Unit Definition</b>	One unit will consume 1.0 nanomole of oxygen per minute at pH 8 at 37 centigrade.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

<b>Storage</b>	Store at -70 centigrade
<b>Shipping</b>	dry ice
<b>GENE INFORMATION</b>	
<b>Gene Name</b>	PTGS2 prostaglandin-endoperoxide synthase 2 (prostaglandin G/H synthase and cyclooxygenase) [ Homo sapiens ]
<b>Official Symbol</b>	PTGS2
<b>Synonyms</b>	PTGS2; prostaglandin-endoperoxide synthase 2 (prostaglandin G/H synthase and cyclooxygenase); prostaglandin G/H synthase 2; COX2; PHS II; PGH synthase 2; cyclooxygenase 2b; prostaglandin H2 synthase 2; COX-2; PHS-2; PGG/HS; PGHS-2; hCox-2; GRIPGHS;
<b>Gene ID</b>	5743
<b>mRNA Refseq</b>	NM_000963
<b>Protein Refseq</b>	NP_000954
<b>MIM</b>	600262
<b>UniProt ID</b>	P35354
<b>Chromosome Location</b>	1q25.2-q25.3
<b>Pathway</b>	Arachidonic acid metabolism, organism-specific biosystem; Arachidonic acid metabolism, conserved biosystem; Biological oxidations, organism-specific

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA



biosystem; C-MYB transcription factor network, organism-specific biosystem; COX reactions, organism-specific biosystem; Calcineurin-regulated NFAT-dependent transcription in lymphocytes, organism-specific biosystem; Calcium signaling in the CD4+ TCR pathway, organism-specific biosystem;

**Function**

enzyme binding; heme binding; heme binding; lipid binding; metal ion binding; oxidoreductase activity; oxidoreductase activity, acting on single donors with incorporation of molecular oxygen, incorporation of two atoms of oxygen; peroxidase activity; peroxidase activity; peroxidase activity; prostaglandin-endoperoxide synthase activity;

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA