

## Recombinant Human PTGS1 Protein, His-tagged

Cat. No. PTGS1-045H Lot. No. (See product label)

### SPECIFICATION

**Product Overview** Recombinant N-terminal His-tagged full-length human PTGS1 protein (24-599) was expressed using the baculovirus system.

**Species** Human

**Source** Insect Cells

**ProteinLength** 24-599

**Description** This is one of two genes encoding similar enzymes that catalyze the conversion of arachinodate to prostaglandin. The encoded protein regulates angiogenesis in endothelial cells, and is inhibited by nonsteroidal anti-inflammatory drugs such as aspirin. Based on its ability to function as both a cyclooxygenase and as a peroxidase, the encoded protein has been identified as a moonlighting protein. The protein may promote cell proliferation during tumor progression. Alternative splicing results in multiple transcript variants.

**Molecular Mass** ~70 kDa

**Purity** ≥85% estimated by SDS-PAGE

**Unit Definition** One unit is defined as the amount of enzyme required to consume 1 nmol of oxygen per minute at 37 centigrade in 100 mM Tris, pH8.0, containing 100 μM arachidonate, 5 mM EDTA, 2 mM phenol, and 1 μM hematin.

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|                       |   |
|-----------------------|---|
| <b>Stability</b>      | ≥ 1 year  |
| <b>Storage</b>        | At -80 centigrade.  |
| <b>Storage Buffer</b> | 80 mM Tris, pH 8.0, with 0.01% polysorbate 20, 300 μM DDC, and 10% glycerol |

## GENE INFORMATION

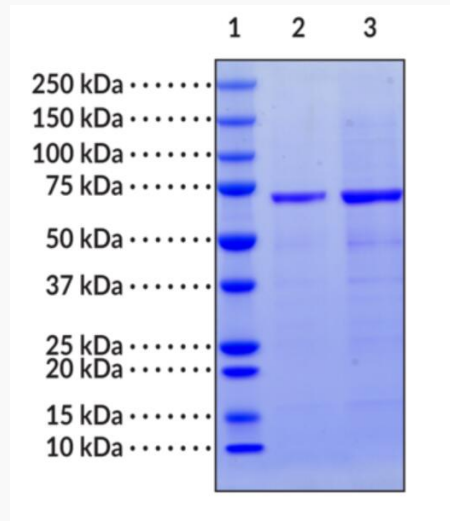
|                        |  |
|------------------------|--|
| <b>Gene Name</b>       | PTGS1 prostaglandin-endoperoxide synthase 1 [ Homo sapiens (human) ]   |
| <b>Official Symbol</b> | PTGS1  |
| <b>Synonyms</b>        | PTGS1; prostaglandin-endoperoxide synthase 1; COX1; COX3; PHS1; PCOX1; PES-1; PGHS1; PTGHS; PGG/HS; PGHS-1; prostaglandin G/H synthase 1; PGH synthase 1; cyclooxygenase-1; prostaglandin H2 synthase 1; prostaglandin-endoperoxide synthase 1 (prostaglandin G/H synthase and cyclooxygenase); EC 1.14.99.1 |
| <b>Gene ID</b>         | 5742   |
| <b>mRNA Refseq</b>     | NM_000962  |
| <b>Protein Refseq</b>  | NP_000953  |
| <b>MIM</b>             | 176805   |
| <b>UniProt ID</b>      | P23219   |

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**SDS-PAGE analysis  
of PTGS1**



Lane 1: MW Markers  
Lane 2: PTGS1 (2 µg)  
Lane 3: PTGS1 (4 µg)

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