# **Recombinant Human COX-2 Protein**



## **RPCB1890**

## **Product Information**

**Product SKU**: RPCB1890 **Gene ID**: 5743 **Size**: 50μg

**Tag**: C-His **Reactivity**: Human

#### **Additional Information**

**Expression Host**: Baculovirus-Insect Cells **Swissprot**: P35354

**Purity**: >90% as determined by SDS-PAGE

#### **Protein Information**

**Background**: PTGS2, also known as COX-2, is s component of Prostaglandin-endoperoxide

synthase (PTGS). 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. PTGS2 is overexpressed

in many cancers. The overexpression of PTGS2 along with increased angiogenesis and

GLUT-1 expression is significantly associated with gallbladder carcinomas.

Furthermore the product of COX-2, PGH2 is converted by prostaglandin E2 synthase

into PGE2, which in turn can stimulate cancer progression. Consequently inhibiting

COX-2 may have benefit in the prevention and treatment of these types of cancer.

PTGS2 is regulated by specific stimulatory events, suggesting that it is responsible for

the prostanoid biosynthesis involved in inflammation and mitogenesis. It mediates

the formation of prostaglandins from arachidonate and may have a role as a major

mediator of inflammation and/or a role for prostanoid signaling in activity-

dependent plasticity.

**Protein Description**: High quality, high purity and low endotoxin recombinant Recombinant Human COX-

2 Protein, tested reactivity in Baculovirus-Insect Cells and has been validated in SDS-

PAGE.100% guaranteed.

**Endotoxin**: <1EU/μg

**Formulation**: Lyophilized from sterile 50mM Tris, 100mM NaCl, 0.5mM PMSF, 10% glycerol, pH 8.0.

**Storage**: Store at -20°C.Store the lyophilized protein at -20°C to -80 °C up to 1 year from the

date of receipt.After reconstitution, the protein solution is stable at -20°C for 3

months, at 2-8°C for up to 1 week.