

Recombinant Human COX-2 Protein

Catalog No.: RP02992LQ **Recombinant**

Sequence Information

Species	Gene ID	Swiss Prot
Human	5743	P35354

Tags

60-85 kDa

Synonyms

PTGS2; COX2; Prostaglandin G/H synthase 2; Cyclooxygenase-2; COX-2; PHS II

Product Information

Source	Purification
Baculovirus-Insect Cells	≥ 90 % as determined by SDS-PAGE.

Calculated MW Observed MW

[In Stock] [3 to 5 weekdays] 68.5 kDa

Endotoxin

< 1 EU/μg of the protein by LAL method.

Formulation

Supplied as sterile 50 mM Tris, 100 mM NaCl, 10% Glycerol, pH 8.0.

Reconstitution

Background

COX-2, is a 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 H 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.

Basic Information

Description

Recombinant Human COX-2 Protein is produced by Baculovirus-Insect Cells expression system. The target protein is expressed with sequence (Met 1-Leu 604) of Human COX-2 fused with His tag at the C-terminus.

Bio-Activity

Measured by its ability to convert arachidonic acid to prostaglandin H₂. The specific activity is >600 pmols/min/μg.

Shipping

Lyophilized proteins are shipped at ambient temperature.
Liquid proteins are shipped at frozen temperature with dry ice.
Upon receipt, store it immediately at the temperature recommended below.

Storage

Store at -80°C
Avoid repeated freeze/thaw cycles.

Operational Notes

For your safety and health, please wear a lab coat and disposable gloves for handling.

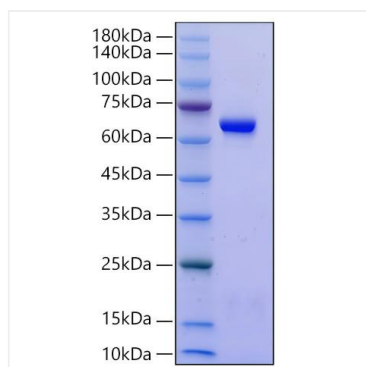
Contact

☎ | 400-999-6126

 ✉ | cn.market@abclonal.com.cn

 🌐 | www.abclonal.com.cn

Validation Data



Recombinant Human COX-2 Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.