

AP00117CP-N**Cyclooxygenase 1 Control Peptide****Alternate names:**

COX-1, COX1, Cyclooxygenase-1, PGH synthase 1, PGHS-1, PTGS1, Prostaglandin G/H synthase 1, Prostaglandin H2 synthase 1, Prostaglandin-endoperoxide synthase 1

Quantity:

50 µg

Concentration:

0.2 mg/ml

Background:

Cyclooxygenase (COX), also known as Prostaglandin H2 synthase and Prostaglandin endoperoxide synthase, is a key enzyme in the of conversion arachidonic acid to Prostaglandin H2. Prostaglandin H2 is converted by other enzymes into inflammatory mediators prostaglandin (PG) D2, PGE2, PGF2a, PGI2 and Thromboxane A2. Thus, COX is a key enzyme in the production of inflammatory agents and is the target of intense research and drug discovery activities. There are two enzymes of COX, COX 1 and COX 2. COX 1 is constitutively produced in many (most) cell types. It is important in the gut for the production of prostaglandins, which inhibit gastric secretion. It can be induced in monocytes, macrophages and other cells. It is induced as part of the inflammatory response by IL 1beta and other cytokines. It is induced by growth factors such as EGF and PDGF. Expression is inhibited by glucocorticosteroids such as cortisol and dexamethasone. Lipopolysaccharide in bacterial infections induces COX 2. COX 2 is also found in elevated levels in synoviocytes from rheumatoid arthritis patients. The discomforts of inflammation such as pain and swelling are largely due to the action of prostaglandins produced by COX2.

Uniprot ID:

[P23219](#)

NCBI:

[NP_000953.2](#)

GeneID:

[5742](#)

Format:

State: Liquid peptide

Buffer System: PBS, pH 7.2, containing 0.1% BSA and 0.02% thimerosal

Applications:

Western blot: It usually blocks the antibody activity completely in Western blot analysis by incubating the peptide with equal volume of antibody for 30 minutes at 37°C.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity:

Control peptide for antibody AP00117PU-N only.

Storage:

Store the antibody undiluted at -20°C or for long term storage (in aliquots) at -70°C. Avoid repeated freezing and thawing.
Shelf life: one year from despatch.