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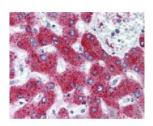
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## Cyclooxygenase-2 Antibody

CATALOG NUMBER: 49-768

Background
BACKGROUND:



Immunohistochemistry staining of Cyclooxygenase-2 in liver tissue using Cyclooxygenase-2 Antibody.

Specifications	
SPECIES REACTIVITY:	Human, Mouse, Rat
TESTED APPLICATIONS:	ELISA, IHC, IP, WB
APPLICATIONS:	Cyclooxygenase-2 antibody can be used in immunohistochemistry starting at 2.4 ug/mL.
USER NOTE:	Optimal dilutions for each application to be determined by the researcher.
IMMUNOGEN:	Cyclooxygenase - 2 antibody was raised against a synthetic peptide corresponding to the C-Terminus of Cyclooxygenase - 2 (Rat).
HOST SPECIES:	Rabbit
Properties	
•	
PURIFICATION:	Immunoaffinity Chromatography
PHYSICAL STATE:	Liquid
BUFFER:	10 mM PBS, pH 7.6, 0.2% BSA, 15 mM sodium azide, before the addition of glycerol to 40%
STORAGE CONDITIONS:	Store Cyclooxygenase-2 antibody at 4 °C or -20 °C. As with all antibodies avoid freeze/thaw cycles.
CLONALITY:	Polyclonal
CONJUGATE:	Unconjugated
A 1 199 11 6	
Additional Info	
ALTERNATE NAMES:	PTGS2, COX-2, Cyclooxygenase-2, COX2, Cyclooxygenase 2b, HCox-2, GRIPGHS, PGH synthase 2, PGHS-2, PHS II, PHS-2, Prostaglandin H2 synthase 2, PGG/HS, Prostaglandin G/H synthase 2
ACCESSION NO.:	P35354
PROTEIN GI NO.:	3915797
OFFICIAL SYMBOL:	PTGS2
GENE ID:	5743

COX2 (Cyclooxygenase-2) is an inducible enzyme. It is involved in the response of cells to growth factors, tumor

promoters, and cytokines that induce its expression. Given its role in synthesizing prostaglandins, COX2 is therefore of interest in studying immune response regulation. COX2 is induced by a wide variety of stimuli and was initially identified as immediate-early growth response gene. In addition, COX2 expression markedly increased in 85-90% of human colorectal adenocarcinoma whereas COX1 levels remain unchanged. Prostaglandin-endoperoxide synthase (fatty acid cyclooxygenase; PGH synthase; Cox-2) is a key enzyme in prostaglandin biosynthesis. The first rate-limiting step in the conversion of arachidonic acid to prostaglandins is catalyzed by Cox-1 and Cox-2. The cyclooxygenase activity of Cox-2 is inhibited by nonsteroidal antiinflammatory drugs such as aspirin and endomethacin. It is a mitogen-inducible gene (unlike Cox-1, which is a house-keeping gene), and this means it probably is a primary mediator of the inflammatory response.

## FOR RESEARCH USE ONLY

December 13, 2016