

## Anti-COX-2 (RABBIT) Antibody - 100-401-226

**Code:** 100-401-226

**Size:** 100 µL

**Product Description:** Anti-COX-2 (RABBIT) Antibody - 100-401-226

**Concentration:** 55 mg/mL by Refractometry

**PhysicalState:** Liquid (sterile filtered)

<b>Label</b>	Unconjugated
<b>Host</b>	Rabbit
<b>Gene Name</b>	PTGS2, COX2
<b>Species Reactivity</b>	human, mouse, rat
<b>Stabilizer</b>	None
<b>Preservative</b>	0.01% (w/v) Sodium Azide
<b>Storage Condition</b>	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
<b>Synonyms</b>	rabbit anti-COX2 antibody, Prostaglandin G/H synthase 2 antibody, Cyclooxygenase-2 antibody, Prostaglandin-endoperoxide synthase 2 antibody, Prostaglandin H2 synthase 2 antibody, PGH synthase 2 antibody, PGHS-2 antibody
<b>Application Note</b>	Cox-2 (Cyclooxygenase-2) is an inducible enzyme that is normally absent from cells, however, in response to growth factors, tumor promoters and some cytokines, it undergoes a rapid and transient expression. This antiserum against Human Cox-2 and has been tested for use in immunoblotting and ELISA. The antibody recognizes Cox-2 at 70kDa in Sf9 cell lines transfected with Cox-2 as well as in WISH cells induced with IL-1b. Reactivity in other immunoassays is unknown.
<b>Background</b>	COX-2, also known as prostaglandin H synthase, was identified less than a decade ago. Its discovery was followed by a period of discovery and drug development to create a "super aspirin" and led to insights into arthritis, Alzheimer's disease, colorectal cancer and regulation of brain and kidney function in search of better treatments for degenerative and inflammatory diseases. Two different isoforms of the enzyme are known, Cox-1 and Cox-2.
<b>Purity And Specificity</b>	This antiserum is directed against human Cox-2 and is useful in determining its presence in western blotting and ELISA experiments. The antibody does not cross react with Cox-1. Cox-2 is involved in the response of cells to growth factors, tumor promoters, and cytokines that induce its expression. Given its role in synthesizing prostaglandins, Cox-2 is therefore of interest in studying immune response regulation. This antibody can detect Cox-2 in human, mouse and rat. Reactivity of this antibody with Cox-2 from other species is unknown.
<b>Assay Dilutions</b>	User Optimized
<b>ELISA</b>	1:10,000 - 1:50,000
<b>Western Blot</b>	1:5,000 - 1:10,000
<b>Immunohistochemistry</b>	User Optimized
<b>Other Assays</b>	User Optimized
<b>Expiration</b>	Expiration date is one (1) year from date of opening.
<b>Immunogen</b>	This whole rabbit serum was prepared by repeated immunizations with a fusion protein corresponding to the carboxy-terminus of human Cox-2.
<b>General Reference</b>	Hittelman, A.B. et al., (1999). Differential regulation of glucocorticoid receptor transcriptional activation via AF-1-associated proteins. <i>EMBO J</i> Oct 1;18(19):5380-8.  Gierse, J. K. et al. (1996) A Single Amino Acid Difference Between Cyclooxygenase-1 (COX-1) and -2 (COX-2) Reverses the Selectivity of COX-2 Specific Inhibitors. <i>J. Biol. Chem.</i> 271:15810-15814.
<b>Specific Reference</b>	Tai, H. et. al., (2000) Induction of NAD(+)-linked 15-hydroxyprostaglandin dehydrogenase expression by androgens in human prostate cancer cells. <i>Biochem Biophys Res Commun.</i> Sep 16;276(1):77-81.  Guan, Z. et al. (1998) Interleukin-1-induced Cyclooxygenase-2 Expression Requires Activation of Both c-Jun NH2-terminal Kinase and p38 MAPK Signal Pathways in Rat Renal Mesangial Cells. <i>J.Biol Chem</i> , 273(44): 28670-28676.

## Related Products

100-401-149	Anti-EGFR (RABBIT) Antibody - 100-401-149
600-401-281	Anti-MAPKAP Kinase 2 (RABBIT) Antibody - 600-401-281
600-401-928	Anti-EGFR pY1197 (RABBIT) Antibody - 600-401-928
610-4302	Anti-MOUSE IgG (H&L) (RABBIT) Antibody Peroxidase Conjugated - 610-4302

## Related Links

UniProtKB - P35354

<http://www.uniprot.org/uniprot/P35354>

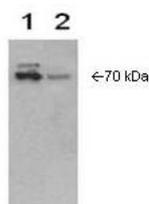
NCBI - P35354.2 <http://www.ncbi.nlm.nih.gov/protein/P35354.2>

GenID - 5743

## Images

1

Rockland's anti-Cox2 is shown to detect Cox-2 present in Cox-2 transfected Sf9 cell extract (lane 1) and IL-1 $\beta$  induced WISH cell extract (lane 2). Detection occurs using a 1:10,000 dilution of antibody followed by 1:10,000 dilution of HRP Goat-a-Rabbit with visualization via ECL. Film exposure approximately 1'. Other detection systems will yield similar results.



## Disclaimer

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