

## Anti-COX2/Cyclooxygenase 2/PTGS2 Antibody Picoband®

Catalog Number: A00084

### About PTGS2

Cyclooxygenase (Cox) is the key enzyme in conversion of arachidonic acid to PGs, and two isoforms, Cox-1 and Cox-2, have been identified. Cox-2 gene encodes an inducible prostaglandin synthase enzyme that is overexpressed in adenocarcinomas and other tumors. Deletion of the murine Cox-2 gene in Min mice reduced the incidence of intestinal tumors, suggesting that it is required for tumorigenesis. This gene is localized to sites associated with retinal blood vessels, and plays an important role in blood vessel formation in the retina. And the glucocorticoid receptor suppression of COX-2 is also crucial for curtailing lethal immune activation, and suggests new therapeutic approaches for regulation of T-cell-mediated inflammatory diseases.

### Overview

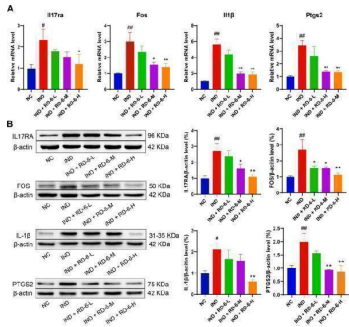
Product Name	Anti-COX2/Cyclooxygenase 2/PTGS2 Antibody Picoband®
Reactive Species	Human
Description	Boster Bio Anti-COX2/Cyclooxygenase 2/PTGS2 Antibody Picoband® catalog # A00084. Tested in WB applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	WB
Clonality	Polyclonal
Formulation	Each vial contains antibody formulated with stabilizing components, 0.9 mg NaCl, 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> , and 0.05 mg NaN <sub>3</sub> . *This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P35354

### Technical Details

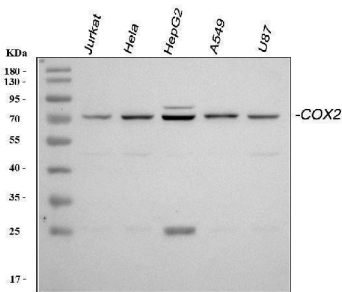
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human PTGS2, different from the related mouse and rat sequences by eight amino acids.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western

	blot.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.1-0.5ug/ml, Human

## Anti-COX2/Cyclooxygenase 2/PTGS2 Antibody Picoband® (A00084) Images



The pretreatment of RD-6 inhibited the IL-17 signaling pathway in indomethacin-induced GU rats. The expression of IL17RA, FOS, IL1B, and PTGS2 determined in gastric tissue by qRT-PCR (A) and western blotting (B). Data are expressed as mean  $\pm$  S.E.M (n = 3). One-way ANOVA with the uncorrected Fisher's LSD test was used to evaluate multiple comparisons. # p < 0.05, ## p < 0.01 vs. NC group; \* p < 0.05, \*\* p < 0.01 vs. IND group. NC, normal control; IND, indomethacin; RD-6-L, M, and H represent Ruda-6 at low, medium and high doses, respectively. Index in PubMed under a CC BY license. PMID: 37637418



Western blot analysis of PTGS2 using anti-PTGS2 antibody (A00084). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30  $\mu$ g of sample under reducing conditions. Lane 1: human Jurkat whole cell lysates, Lane 2: human HeLa whole cell lysates, Lane 3: human HepG2 whole cell lysates, Lane 4: human A549 whole cell lysates, Lane 5: human U87 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-PTGS2 antigen affinity purified polyclonal antibody (Catalog # A00084) at 0.5  $\mu$ g/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for PTGS2 at approximately 75 kDa. The expected band size for PTGS2 is at 69 kDa.

## 26 Publications Citing This Product

1. PubMed ID: PMID:29218088, Effect of astragaloside IV on diabetic gastric mucosa in vivo and in vitro
2. PubMed ID: 10.1016/j.intimp.2021.108119, Nootkatone protects cartilage against degeneration in mice by inhibiting NF-kappaB signaling pathway
3. PubMed ID: 10.1016/j.phymed.2021.153813, The Bioactive Alkaloids Identified from Cortex Phellodendri Ameliorate Benign Prostatic Hyperplasia via LOX-5/COX-2 Pathway

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