

Anti-Cox-2 Antibody

Catalog Number: A00084-1

About PTGS2

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. 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.

Overview

Product Name	Anti-Cox-2 Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Cox-2 Antibody (Catalog # A00084-1). Tested in WB applications. This antibody reacts with Human, Mouse, Rat.
Application	ELISA, IHC, WB
Clonality	Polyclonal
Formulation	0.01% (w/v) Sodium Azide
Storage Instructions	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. Expiration date is one (1) year from date of opening. (Ship on dry ice.)
Host	Rabbit
Uniprot ID	P35354

Technical Details

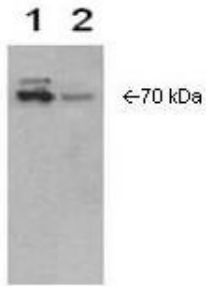
Immunogen	This whole rabbit serum was prepared by repeated immunizations with a fusion protein corresponding to the carboxy-terminus of human Cox-2.
Predicted Reactive Species	Human
Isotype	Antiserum
Form	Liquid (sterile filtered)
Concentration	55 mg/mL by Refractometry
Purification	This antiserum is directed against human Cox-2. Two different isoforms of the enzyme are known,

Cox-1 and Cox-2. A BLAST analysis was used to suggest cross-reactivity with Cox-2 in human, mouse and rat based on a homology with the immunizing sequence and should not cross react with Cox-1. Reactivity against homologues from other sources is not known. Reactivity of this antibody with Cox-2 from other species is unknown.

Suggested Dilutions

ELISA: 1:10,000 - 1:50,000
IHC: User optimized
WB: 1:5,000 - 1:10,000
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. 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.

Anti-Cox-2 Antibody (A00084-1) Images



Boster's anti-Cox2 is shown to detect Cox-2 present in Cox-2 transfected Sf9 cell extract (lane 1) and IL-1 β 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.

12 Publications Citing This Product

1. PubMed ID: 25299052, Toll-Like Receptor 4 Prompts Human Breast Cancer Cells Invasiveness via Lipopolysaccharide Stimulation and Is Overexpressed in Patients with Lymph Node Metastasis
2. PubMed ID: 26257474, Granulocyte Macrophage-Colony Stimulating Factor (GM-CSF) Downregulates the Expression of Protumor Factors Cyclooxygenase-2 and Inducible Nitric Oxide Synthase in a GM-CSF Receptor-Independent Manner in Cervical Cancer Cells
3. PubMed ID: 25297608, Liu H, Yan Zq, Li B, Yin Sy, Sun Q, Kou Jj, Ye D, Ferns K, Liu Hy, Liu Sl. J Ovarian Res. 2014 Sep 5;7:87. Doi: 10.1186/S13048-014-0087-1. Reduced Expression Of Sox7 In Ovarian Cancer: A Novel Tumor Suppressor Through The Wnt/??-Catenin Signaling ...

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