ARG63562
anti-COX2 antibody

Package: 100 µg
Store at: -20°C

Summary

Product Description	Goat Polyclonal antibody recognizes COX2
Tested Reactivity	Hu, Ms
Predict Reactivity	Cow, Dog, Pig
Tested Application	FACS, ICC/IF, WB
Host	Goat
Clonality	Polyclonal
Isotype	IgG
Target Name	COX2
Species	Human
Immunogen	C-NPTVLLKERSTEL
Conjugation	Un-conjugated
Alternate Names	PHS II; Prostaglandin H2 synthase 2; PHS-2; Cyclooxygenase-2; PGHS-2; COX2; PGG/HS; COX-2; GRIPGHS; hCox-2; PGH synthase 2; Prostaglandin G/H synthase 2; Prostaglandin-endoperoxide synthase 2; EC 1.14.99.1

Application Instructions

Application table

Application	Dilution
FACS	10 µg/ml
ICC/IF	10 µg/ml
WB	0.1 - 0.3 µg/ml

Application Note

WB: Recommend incubate at RT for 1h.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

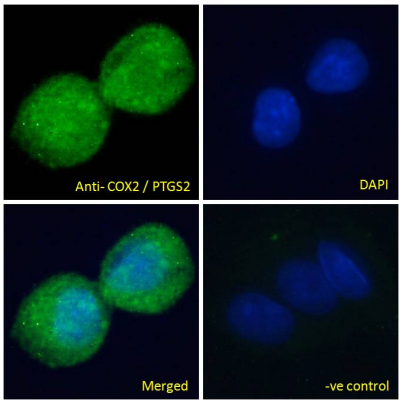
Form	Liquid
Purification	Purified from goat serum by antigen affinity chromatography.
Buffer	Tris saline (pH 7.3), 0.02% Sodium azide and 0.5% BSA.
Preservative	0.02% Sodium azide
Stabilizer	0.5% BSA
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated

	freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 19225 Mouse GeneID: 5743 Human Swiss-port # P35354 Human Swiss-port # Q05769 Mouse
Background	COX2: Prostaglandin-endoperoxide synthase (PTGS), also known as cyclooxygenase, is the key enzyme in prostaglandin biosynthesis, and acts both as a dioxygenase and as a peroxidase. There are two isozymes of PTGS: a constitutive PTGS1 and an inducible PTGS2, which differ in their regulation of expression and tissue distribution. This gene encodes the inducible isozyme. It is regulated by specific stimulatory events, suggesting that it is responsible for the prostanoid biosynthesis involved in inflammation and mitogenesis. [provided by RefSeq, Feb 2009]
Function	COX2 converts arachidonate to prostaglandin H2 (PGH2), a committed step in prostanoid synthesis (PubMed:26859324, PubMed:27226593). Constitutively expressed in some tissues in physiological conditions, such as the endothelium, kidney and brain, and in pathological conditions, such as in cancer. PTGS2 is responsible for production of inflammatory prostaglandins. Up-regulation of PTGS2 is also associated with increased cell adhesion, phenotypic changes, resistance to apoptosis and tumor angiogenesis. In cancer cells, PTGS2 is a key step in the production of prostaglandin E2 (PGE2), which plays important roles in modulating motility, proliferation and resistance to apoptosis. During neuroinflammation, plays a role in neuronal secretion of specialized preresolving mediators (SPMs), especially 15-R-lipoxin A4, that regulates phagocytic microglia. [UniProt]
Highlight	Related products: COX2 antibodies; COX2 Duos / Panels; Anti-Goat IgG secondary antibodies; Related news: Exploring Antiviral Immune Response
Research Area	Inflammation Study antibody
Calculated Mw	69 kDa
PTM	S-nitrosylation by NOS2 (iNOS) activates enzyme activity. S-nitrosylation may take place on different Cys residues in addition to Cys-526.

Images

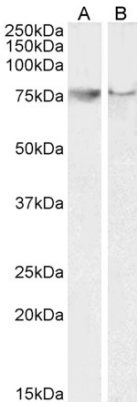


ARG63562 anti-COX2 antibody ICC/IF image

Immunofluorescence: Paraformaldehyde fixed HepG2 cells permeabilized with 0.15% Triton. Cells were stained with ARG63562 anti-COX2 antibody (green) at 10 µg/ml dilution for 1 hour. DAPI (blue) for nuclear staining. Negative control: Unimmunized goat IgG (green) at 10 µg/ml dilution.

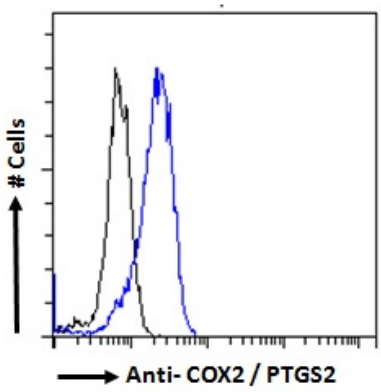
ARG63562 anti-COX2 antibody WB image

Western blot: 35 µg of H460 cell lysate (in RIPA buffer) stained with ARG63562 anti-COX2 antibody at 0.5 µg/ml dilution and incubated at RT for 1 hour.



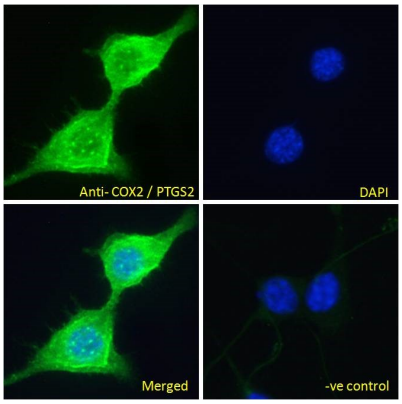
ARG63562 anti-COX2 antibody WB image

Western blot: 35 µg of A549 (A) and Daudi (B) cell lysates (in RIPA buffer) stained with ARG63562 anti-COX2 antibody at 0.1 µg/ml dilution and incubated at RT for 1 hour.



ARG63562 anti-COX2 antibody FACS image

Flow Cytometry: Paraformaldehyde-fixed HeLa cells permeabilized with 0.5% Triton. Cells were stained with ARG63562 anti-COX2 antibody (blue line) at 10 µg/ml dilution for 1 hour, followed by incubation with Alexa FluorR 488 labelled secondary antibody. IgG control: Unimmunized goat IgG (black line).



ARG63562 anti-COX2 antibody ICC/IF image

Immunofluorescence: Paraformaldehyde fixed NIH/3T3 cells permeabilized with 0.15% Triton. Cells were stained with ARG63562 anti-COX2 antibody (green) at 10 µg/ml dilution for 1 hour. DAPI (blue) for nuclear staining. Negative control: Unimmunized goat IgG (green) at 10 µg/ml dilution.