

## ARG56470 anti-COX2 antibody [12C10]

Package: 50 µg  
Store at: -20°C

### Summary

Product Description	Mouse Monoclonal antibody [12C10] recognizes COX2
Tested Reactivity	Hu, Ms, Sheep
Tested Application	ELISA, FACS, WB
Specificity	This antibody does not react to COX-1.
Host	Mouse
Clonality	Monoclonal
Clone	12C10
Isotype	IgG1
Target Name	COX2
Species	Human
Immunogen	Synthetic peptide around the C-terminus of Human COX-2.
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
	ELISA	1:200
	FACS	1:200
	WB	1:200
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

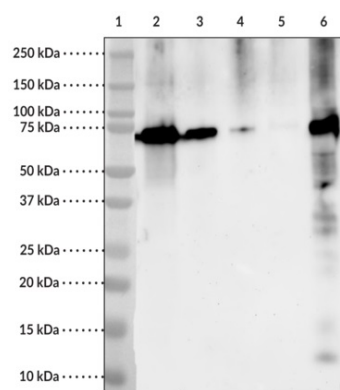
### Properties

Form	Liquid
Purification	Purification with Protein G.
Buffer	TBS (pH 7.4), 0.02% Sodium azide, 50% Glycerol and 0.1% BSA.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol and 0.1% BSA
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. 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	<a href="#">GeneID: 19225 Mouse</a> <a href="#">GeneID: 5743 Human</a> <a href="#">Swiss-port # P35354 Human</a> <a href="#">Swiss-port # Q05769 Mouse</a>
Gene Symbol	PTGS2
Gene Full Name	prostaglandin-endoperoxide synthase 2 (prostaglandin G/H synthase and cyclooxygenase)
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 isoforms of PTGS: a constitutive PTGS1 and an inducible PTGS2, which differ in their regulation of expression and tissue distribution. This gene encodes the inducible isoform. 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 proresolving mediators (SPMs), especially 15-R-lipoxin A4, that regulates phagocytic microglia. [UniProt]
Highlight	Related products: <a href="#">COX2 antibodies</a> ; <a href="#">COX2 Duos / Panels</a> ; <a href="#">Anti-Mouse IgG secondary antibodies</a> ; Related news: <a href="#">Exploring Antiviral Immune Response</a>
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.



ARG56470 anti-COX2 antibody [12C10] WB image

Western blot: 1) Standard, 2) 100ng of COX-2 (ovine), 3) 10ng of COX-2 (ovine), 4) 1ng of COX-2 (ovine), 5) 500ng of COX-1 (ovine) (negative control), and 6) 1 µg of RAW 264.7 Microsomes stained with ARG56470 anti-COX2 antibody [12C10].