

ARG66380 anti-COX2 antibody [SQab18107]

Package: 100 µl
Store at: -20°C

Summary

Product Description	Recombinant Rabbit Monoclonal antibody [SQab18107] recognizes COX2
Tested Reactivity	Hu, Ms
Tested Application	FACS, ICC/IF, WB
Host	Rabbit
Clonality	Monoclonal
Clone	SQab18107
Isotype	IgG
Target Name	COX2
Species	Human
Immunogen	Synthetic peptide corresponding to residues on the C-terminus of Human Cox2.
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	1:40 - 1:160
	ICC/IF	1:400 - 1:2000
	WB	1:1000 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

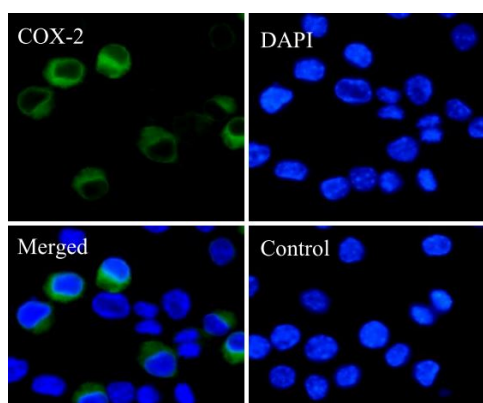
Properties

Form	Liquid
Purification	Purification with Protein A.
Buffer	PBS, 0.01% Sodium azide, 40% Glycerol and 0.05% BSA.
Preservative	0.01% Sodium azide
Stabilizer	40% Glycerol and 0.05% 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.

Bioinformation

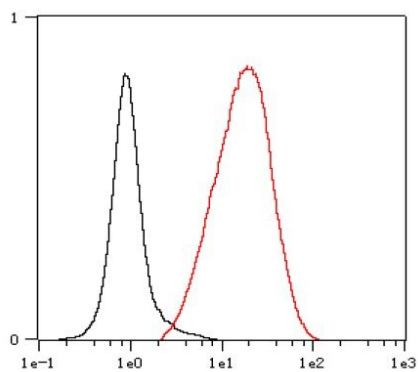
Gene Symbol	PTGS2
Gene Full Name	prostaglandin-endoperoxide synthase 2 (prostaglandin G/H synthase and cyclooxygenase)
Background	COX2: Prostaglandin-endoperoxide synthase (PTGS), also known as cyclooxygenase, is the key enzyme in prostaglandin biosynthesis, and acts both as a dioxygenase and as a peroxidase. 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: COX2 antibodies ; COX2 Duos / Panels ; Anti-Rabbit 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. [UniProt]

Images



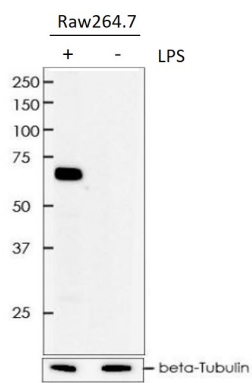
ARG66380 anti-COX2 antibody [SQab18107] ICC/IF image

Immunofluorescence: Raw264.7 Cells (treated with LPS) were fixed with 4% paraformaldehyde for 30 min at RT, permeabilized with 0.1% Triton X-100 for 10 min at RT then blocked with 10% goat serum for half an hour at room temperature. Samples were stained with ARG66380 anti-COX2 antibody [SQab18107] (1:2000) at 4°C. DAPI (blue) was used as the nuclear counter stain. Control: PBS and secondary antibody.



ARG66380 anti-COX2 antibody [SQab18107] FACS image

Flow Cytometry: Raw264.7 (treated with LPS) were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% TritonX-100 for 15 min. The cells were then stained with ARG66380 anti-COX2 antibody [SQab18107] at 1:160 dilution (red) in 1x PBS/1% BSA for 30 min at room temperature, followed by Alexa Fluor® 488 labelled secondary antibody. Unlabelled sample (black) was used as a control.



ARG66380 anti-COX2 antibody [SQab18107] WB image

Western blot: 20 µg of Raw264.7 treated with LPS at 1 µg/ml for 6 hours (left) or untreated Raw264.7 (right). The blots were stained with ARG66380 anti-COX2 antibody [SQab18107] at 1:1000 dilution.