ARG52899
anti-COX2 antibody

Package: 500 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes COX2
Tested Reactivity	Hu, Ms, Rat, Hm
Tested Application	ELISA, ICC/IF, IHC-Fr, IHC-P, IP
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	COX2
Species	Rat
Immunogen	Synthetic peptide derived from C-terminus of rat 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	Assay-Dependent
ICC/IF	Assay-Dependent
IHC-Fr	Assay-Dependent
IHC-P	1:100
IP	Assay-Dependent

Application Note: IHC-P: Antigen Retrieval: Boil tissue section in 10mM citrate buffer, pH 6.0 for 10 min followed by cooling at RT for 20 min.
Incubation Time: 10 min at RT.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Positive Control: Breast Carcinoma, Colon, Lung

Properties

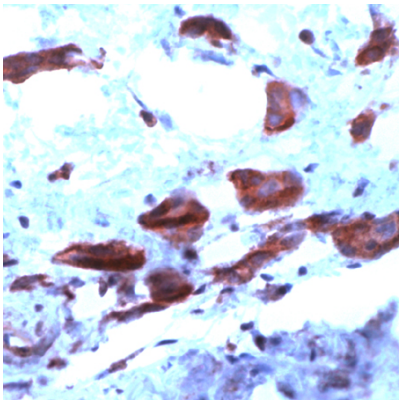
Form	Liquid
Purification	Immunogen affinity purified
Buffer	PBS (pH 7.6), 1% BSA and < 0.1% Sodium azide
Preservative	< 0.1% Sodium azide

Stabilizer	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 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

Gene Symbol	Ptgs2
Gene Full Name	prostaglandin-endoperoxide synthase 2
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-Rabbit IgG secondary antibodies; Related news: More effective cocktail therapy for cancer immune evasion 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.
Cellular Localization	Cytoplasm, Membrane

Images



ARG52899 anti-COX2 antibody IHC-P image

Immunohistochemistry: Human Breast Carcinoma stained with ARG52899 anti-COX2 antibody.