



Mouse Anti-Human COX-2 monoclonal antibody, clone JID661 (CABT-L2795)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	This antibody is intended for qualified laboratories to qualitatively identify by light microscopy the presence of associated antigens in sections of formalin-fixed, paraffin-embedded tissue sections using IHC test methods.
Specificity	Human COX-2
Isotype	IgG
Source/Host	Mouse
Species Reactivity	Human
Clone	JID661
Conjugate	Unconjugated
Applications	IHC
Reconstitution	The prediluted antibody does not require any mixing, dilution, reconstitution, or titration; the antibody is ready-to-use and optimized for staining. The concentrated antibody requires dilution in the optimized buffer, to the recommended working dilution range.
Positive Control	Colon Adenocarcinoma
Format	Liquid
Size	Predilute: 7 ml, Concentrate: 100 µl, Concentrate: 1 ml
Buffer	Predilute: Antibody Diluent Buffer Concentrate: Tris Buffer, pH 7.3 - 7.7, with 1% BSA

Preservative	< 0.1% Sodium Azide
Storage	Store at 2-8°C. Do not freeze.
Ship	Wet ice

BACKGROUND

Introduction	COX-2, also known as cyclooxygenase 2, catalyzes the conversion of arachidonic acid to prostaglandin H2. The inhibition of COX-2 using non-steroidal anti-inflammatory agents limits angiogenesis and tumor growth, and increases apoptosis. The overexpression of COX-2 is linked to increased microvascular density.
Keywords	PTGS2;prostaglandin-endoperoxide synthase 2 (prostaglandin G/H synthase and cyclooxygenase);COX2;COX-2;PHS-2;PGG/HS;PGHS-2;hCox-2;GRIPGHS;prostaglandin G/H synthase 2;PHS II;PGH synthase 2;cyclooxygenase 2b;prostaglandin H2 synthase 2;

GENE INFORMATION

Gene Name	PTGS2 prostaglandin-endoperoxide synthase 2 (prostaglandin G/H synthase and cyclooxygenase) [Homo sapiens (human)]
Official Symbol	PTGS2
Synonyms	PTGS2; prostaglandin-endoperoxide synthase 2 (prostaglandin G/H synthase and cyclooxygenase); COX2; COX-2; PHS-2; PGG/HS; PGHS-2; hCox-2; GRIPGHS; prostaglandin G/H synthase 2; PHS II; PGH synthase 2; cyclooxygenase 2b; prostaglandin H2 synthase 2;
Entrez Gene ID	5743
Protein Refseq	NP_000954
UniProt ID	P35354
Chromosome Location	1q25.2-q25.3
Pathway	Arachidonic acid metabolism; C-MYB transcription factor network; C20 prostanoid biosynthesis; Calcineurin-regulated NFAT-dependent transcription in lymphocytes; Calcium signaling in the CD4+ TCR pathway; Chemical carcinogenesis; Defective AMN causes hereditary megaloblastic anemia 1; Defective BTB causes biotinidase deficiency;
Function	arachidonate 15-lipoxygenase activity; enzyme binding; heme binding; lipid binding; metal ion binding; peroxidase activity; prostaglandin-endoperoxide synthase activity; protein homodimerization activity;