



ABCLONAL BIOTECHNOLOGY, INC.

Cox1 Rabbit pab Antibody

Anti Cox1 antibody

Catalog Number:	A1102	Quantity:	100ul
Lot Number:	A00009	Species:	Rabbit
Gene ID:	4512	Swiss Prot:	P00395

DESCRIPTION

Description	Rabbit polyclonal to Human Cox1
Species	Rabbit
Applications	WB IHC ICC IP FC
Reactivity	H M R
Immunogen	A synthetic peptide of human Cox1
Other Name	PTGS1;COX1 ; COX3 ; PCOX1 ;PGG/HS ;PGHS-1 ; PGHS1 ; PHS1 ;PTGHS ;Prostaglandin G/H synthase 1;Prostaglandin-endoperoxide synthase 1 ;

PROPERTIES

Form	Liquid
Storage instructions	Upon delivery aliquot and store at -20°C or -80°C.
Storage buffer	PBS with 0.1% Sodium Azide, 50% Glycerol,
Purity	Affinity purification
Clonality	Polyclonal
Isotype	IgG

APPLICATION

WB	WB :1/1000-2000
IHC	IHC:1/100-200
ICC	ICC:1/50-100
IP	IP:1/10-50
FC	FC:1/10-50



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BACKGROUND

Cyclooxygenase1 (Cox1) and cyclooxygenase2 (Cox2), family members with 60% homology in humans, catalyze prostaglandin production from arachidonic acid (1,2). While Cox1 expression is constitutive in most tissues, Cox2 expression is induced by lipopolysaccharide (LPS) and peptidoglycan (PGN) (3). PGN activates Ras, leading to phosphorylation of Raf at Ser338 and Erk1/2 at Tyr204. The activation of MAP kinase signaling results in subsequent activation of IKK α / β , phosphorylation of I κ B α at Ser32/36, and NF- κ B activation. Finally, activation of the transcription factor NF- κ B is responsible for the induction of Cox2 expression (4). LPS and PGN induce the clinical manifestations of arthritis and bacterial infections, such as inflammation, fever, and septic shock (5), making Cox2 a useful target for therapeutic anti-inflammatory drugs (3). Cox1 and Cox2 also play a role in the neuropathology of Alzheimer's disease by potentiating γ -secretase activity and β -amyloid generation (6).

1. [Xie, W.L. et al. \(1991\) *Proc Natl Acad Sci USA* 88, 2692-6.](#)
2. [Vane, J.R. et al. \(1998\) *Annu Rev Pharmacol Toxicol* 38, 97-120.](#)
3. [O'Neill, G.P. et al. \(1994\) *Mol Pharmacol* 45, 245-54.](#)
4. [Chen, B.C. et al. \(2004\) *J Biol Chem* 279, 20889-97.](#)
5. [Wang, Q. et al. \(2001\) *Infect Immun* 69, 2270-6.](#)
6. [Qin, W. et al. \(2003\) *J Biol Chem* 278, 50970-7.](#)