COX2Polyclonal Antibody

E90526

Catalog Number: E90526
Amount: 100ul
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 IKKα/β, phosphorylation of IκBα at Ser32/36, and NF-κB activation. Finally, activation of the transcription factor NF-κB is responsible for the induction of Cox2 expression (4). Investigators have shown that LPS and PGN induce the clinical manifestations of arthritis and bacterial infections, such as inflammation, fever, and septic shock (5). Research studies have indicated that Cox1 and Cox2 may also play a role in the neuropathology of Alzheimer's disease by potentiating γ-secretase activity and β-amyloid generation (6).
Species: Rabbit
Isotype: IgG
Storage/Stability: Store at -20oC or -80oC. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Synonyms: COII; MTCO2; COX2;
Immunogen: A synthetic peptide of human COX2
Purification: Affinity purification
Reactivity: H M R
Applications: WB IHC
Molecular Weight: 26kDa
Swiss-Prot No. : P00403
Gene ID: 4513
References: 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.

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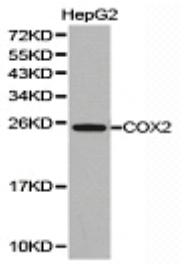
WB 1:500 - 1:1000

IHC 1:50- 1:100



Western blot analysis of extracts of HepG2 celllines, using COX2 antibody.

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