



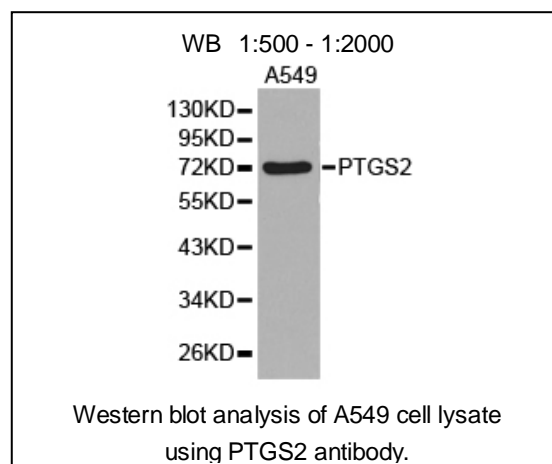
PTGS2 Polyclonal Antibody

E91253**Catalog Number:** E91253**Amount:** 100ul, 100ug/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 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).

Calculated MW: 68kDa**Form of Antibody:** Rabbit IgG in PBS with 0.02% sodium azide, 50% glycerol, pH7.3.**Storage/Stability:** Store at -20°C or -80°C. Avoid freeze / thaw cycles.**Immunogen:** C term -peptide of human PTGS2**Gene ID:** 5743**Synonyms:** PTGS2;COX-2;COX2;GRIPGHS;PGG/HS;PGHS-2;PHS-2;hCox-2 ; cox2**Purification:** Affinity purification**Reactivity:** Human, Mouse, Rat**Applications:** WB**Swiss-Prot No. :** P35354

- References:**
1. Xie, W.L. et al. (1991) Proc Natl Acad Sci USA 88, 2692-6.
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 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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