

Cat. No:	MAB-94444
Size:	100 ug
Clone:	D5H5
Concentration:	1mg/ml
Host:	Rb
Isotype:	IgG
Reactivity:	Hu, Ms, Rt
Applications:	WB 1:1000-1:2000, IHC-P 1:100, IF-IP 1:100, Unmasking buffer: Citrate
Molecular Weight:	74 kDa
Purification:	Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding His108 of human Cox2 protein.
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). 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). Cox2 (D5H5) XP [®] Rabbit mAb recognizes endogenous levels of total Cox2 protein.
Form:	Liquid
Buffer:	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage:	Store at -20°C. Avoid freeze/thaw cycles

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