

# PRODUCT DATA SHEET

Bioworld Technology,Inc.

# **PGHS-2 Rabbit monoclonal antibody**

Catalog: MB66331 Host: Rabbit Reactivity: Human, Mouse, Rat

#### **BackGround:**

Cyclooxygenase1 (Cox1) and cyclooxygenase2 (Cox2), family members with 60% homology in humans, catalyze prostaglandin production from arachidonic acid. While Cox1 expression is constitutive in most tissues, Cox2 expression is induced by lipopolysaccharide (LPS) and peptidoglycan (PGN). 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-kB is responsible for the induction of Cox2 expression. Investigators have shown that LPS and PGN induce the clinical manifestations of arthritis and bacterial infections, such as inflammation, fever, and septic shock. 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.

#### **Product:**

Liquid in 50mM Tris-Glycine (pH 7.4), 0.15M NaCl, 50% Glycerol, 0.01% Sodium azide and 0.05% BSA.

# **Molecular Weight:**

~ 70 kDa

# **Swiss-Prot:**

P35354

#### **Purification&Purity:**

The antibody was purified by immunogen affinity chromatography.

### **Applications:**

WB (1/500 - 1/1000), IHC (1/50 - 1/100)

### Storage&Stability:

Store at 4  ${\mathbb C}$  short term. Aliquot and store at -20  ${\mathbb C}$  long

term. Avoid freeze-thaw cycles.

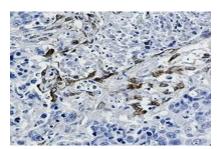
#### **Specificity:**

Recognizes endogenous levels of PGHS-2 protein.

#### **DATA:**



Western blot analysis of PGHS-2 expression in rat brain (A) whole cell lysates.



Immunohistochemical analysis of PGHS-2 staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.78). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

#### Note

For research use only, not for use in diagnostic procedure.

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