

COX-2

Recombinant Rabbit Monoclonal Antibody

Product Datasheet

Catalog# BX00040

Clone# RR644

Predicted Molecular Wt: 69kDa
Species Cross-reactivity: Human Mouse
Species cross-reactivity determined by WB

Purity: ProA affinity purified IgG
Form: Liquid
Swissprot ID: P35354

Applications: WB IF/ICC FC

Background:

Converts arachidonate to prostaglandin H₂ (PGH₂), a committed step in prostanoid synthesis. Constitutively expressed in some tissues in physiological conditions, such as the endothelium, kidney and brain, and in pathological conditions, such as in cancer. PTGS2 is responsible for production of inflammatory prostaglandins. Up-regulation of PTGS2 is also associated with increased cell adhesion, phenotypic changes, resistance to apoptosis and tumor angiogenesis.

Immunogen:

A synthetic peptide corresponding to residues on the C-terminus of human COX-2 was used as an immunogen.

Storage Buffer:

PBS 59%, Sodium azide 0.01%, Glycerol 40%, BSA 0.05%.

Storage conditions:

-20°C.

Storage instructions:

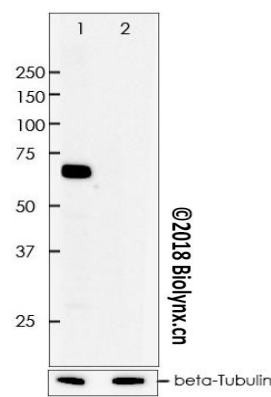
Shipped on blue ice. Upon delivery, aliquot, and store at -20°C. Avoid freeze / thaw cycles.

Recommended Dilutions:

WB: 1:1,000 - 1:2,000
IF/ICC: 1:400 - 1:2,000
FC: 1:40 - 1:160

Background References:

- Kim S.F., Science 310:1966-1970(2005).
- Goodman J.E., Carcinogenesis 25:2467-2472(2004).



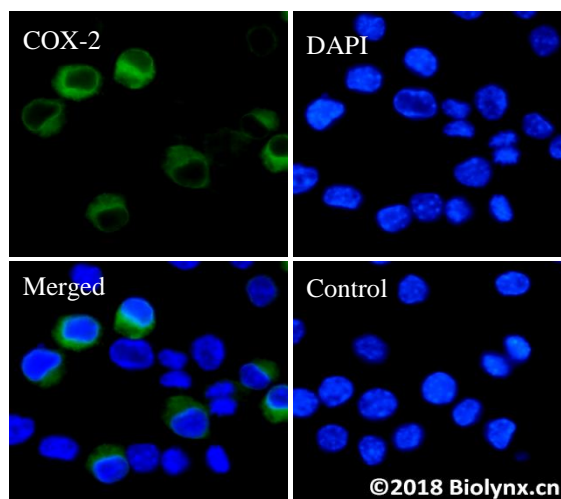
All lanes: Anti-COX-2 antibody
at 1:1,000 dilution

Predicted MW: 69 kDa
Observed MW: 72 kDa

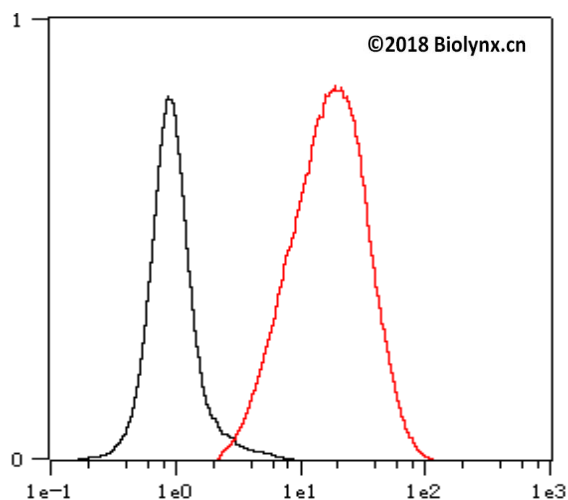
Lysate at 20 µg per lane
2nd Ab:
G&R HRP(H+L) 1:5,000

Lane 1: Raw264.7 treated with
LPS at 1µg/ml for 6 hours
Lane 2: untreated Raw264.7

Exposure: 60s



RR644 staining COX-2 in Raw264.7(+LPS) cells by IF/ICC (immunofluorescence/immunocytochemistry). Cells were fixed with paraformaldehyde, permeabilized with 0.1% Triton X-100 and blocked with 10% goat serum for half an hour at room temperature. Samples were incubated with primary antibody (1:2,000) at 4°C. An Alexa Fluor® 488-conjugated Goat Anti-Rabbit IgG polyclonal was used as the secondary antibody (1:500). DAPI (blue) was used as the nuclear counter stain. Control: PBS and secondary antibody, An Alexa Fluor® 488-conjugated Goat Anti-Rabbit IgG (1:500).



Overlay histogram showing Raw264.7(+LPS) cells stained with RR644 (Red). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% TritonX-100 for 15 min. The cells were then incubated in the antibody (RR644, 1:160 dilution) in 1x PBS/1% BSA for 30 min at room temperature. The secondary antibody used was a Goat Anti-Rabbit Alexa Fluor® 488 (IgG H+L) at 1:2,000 dilution for 20 min at room temperature. Unlabelled sample (Black) was used as a control.

Product QC'd by:



For research use only. Not for use in diagnostic or therapeutic applications.