Product Information Sheet

Polyclonal Anti-Cyclooxygenase-2, *COX-2*

Catalogue No. PA1211

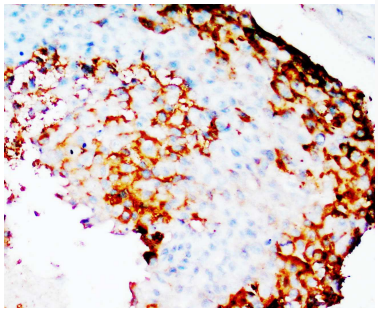
Lot No. 09B01

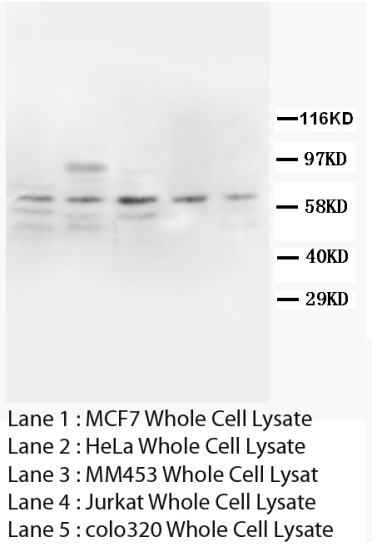
Ig type rabbit IgG

Size 100µg/vial

Specificity
Human, mouse, rat.
No cross reactivity with other proteins.

Recommended application
Western blot
Immunohistochemistry(P)





Lane 1 : MCF7 Whole Cell Lysate
Lane 2 : HeLa Whole Cell Lysate
Lane 3 : MM453 Whole Cell Lysat
Lane 4 : Jurkat Whole Cell Lysate
Lane 5 : colo320 Whole Cell Lysate

Immunogen
A synthetic peptide corresponding to a sequence at the N-terminal of human COX-2, different to the related rat sequence by two amino acids.

Purity
Immunogen affinity purified.

Application

	Concen-tration	Tested Species	Concluded Species	Antigen Retrieval
WB	1µg/ml	Hu, Rat	Ms	-
IHC-P	1-2µg/ml	Hu	-	By Heat
IHC-F	-	-	-	-
ICC	-	-	-	-

Other applications have not been tested.
Optimal dilutions should be determined by end user.

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na_2HPO_4, 0.05mg Thimerosal, 0.05mg NaN_3.

Reconstitution
0.2ml of distilled water will yield a concentration of 500µg/ml.

Storage
At -20˚C for one year. After reconstitution, at 4˚C for one month. It can also be aliquotted and stored frozen at -20˚C for longer time.

To reorder contact us at:
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BACKGROUND

Cyclooxygenase (Cox) is the key enzyme in conversion of arachidonic acid to PGs, and two isoforms, Cox-1 and Cox-2, have been identified.[1] Cox-2 gene encodes an inducible prostaglandin synthase enzyme that is overexpressed in adenocarcinomas and other tumors. Deletion of the murine Cox-2 gene in Min mice reduced the incidence of intestinal tumors, suggesting that it is required for tumorigenesis.[2] This gene is localized to sites associated with retinal blood vessels, and plays an important role in blood vessel formation in the retina.[3] And the glucocorticoid receptor suppression of COX-2 is also crucial for curtailing lethal immune activation, and suggest new therapeutic approaches for regulation of T-cell-mediated inflammatory diseases.[4]

REFERENCE

1. Salmenkivi, K.; Haglund, C.; Ristimaki, A.; Arola, J.; Heikkila, P. : Increased expression of cyclooxygenase-2 in malignant pheochromocytomas. *J. Clin. Endocr. Metab.* 86: 5615-5619, 2001.

2. Liu, C. H.; Chang, S.-H.; Narko, K.; Trifan, O. C.; Wu, M.-T.; Smith, E.; Haudenschild, C.; Lane, T. F.; Hla, T. : Overexpression of cyclooxygenase-2 is sufficient to induce tumorigenesis in transgenic mice. *J. Biol. Chem.* 276: 18563-18569, 2001.

3. Wilkinson-Berka, J. L.; Alousis, N. S.; Kelly, D. J.; Gilbert, R. E. : COX-2 inhibition and retinal angiogenesis in a mouse model of retinopathy of prematurity. *Invest. Ophthal. Vis. Sci.* 44: 974-979, 2003.

4. Brewer, J. A.; Khor, B.; Vogt, S. K.; Muglia, L. M.; Fujiwara, H.; Haegele, K. E.; Sleckman, B. P.; Muglia, L. J. : T-cell glucocorticoid receptor is required to suppress COX-2-mediated lethal immune activation. *Nature Med.* 9: 1318-1322, 2003.