

Recombinant Cyclooxygenase-2 (COX-2) Antibody

Mouse Monoclonal Antibody [Clone r4H12]

Catalog No	Format	Size
5743-MSM10-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
5743-MSM10-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
5743-MSM10-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

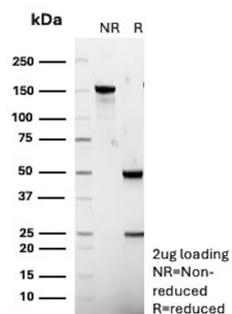
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

Product Details

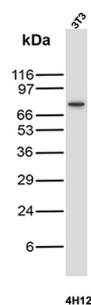
Clone	r4H12
Gene Name	PTGS2
Immunogen	Prokaryotic recombinant protein corresponding to amino acids 38 to 163 of the N-terminal domain of the human cyclooxygenase-2 molecule
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG1 / Kappa
Mol. Weight of Antigen	70-72kDa
Cellular Localization	Cytoplasm
Species Reactivity	Human
Positive Control	Human colon or lung carcinoma. 3T3.

*Optimal dilution for a specific application should be determined.

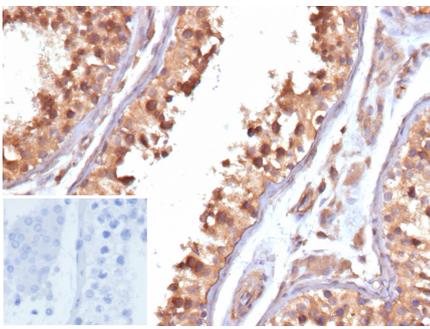
Product Images for Recombinant Cyclooxygenase-2 (COX-2) Antibody



SDS-PAGE Analysis of Purified COX-2 Recombinant Mouse Monoclonal Antibody (r4H12). Confirmation of Purity and Integrity of Antibody.



Western blot analysis of 3T3 cell lysate using Cyclooxygenase-2 (COX-2) Recombinant Mouse Monoclonal Antibody (r4H12).



Formalin-fixed, paraffin-embedded human testis stained with COX-2 Recombinant Mouse Monoclonal Antibody (r4H12). Inset: PBS instead of primary antibody; secondary only negative control.

Specificity & Comments

Prostaglandins are a diverse group of autocrine and paracrine hormones that mediate many cellular and physiologic processes. Prostaglandin H₂ (PGH₂) is an intermediate molecule in formation of the prostaglandins. Cyclooxygenase-1 (Cox-1) and cyclooxygenase-2 (Cox-2) are prostaglandin synthases that catalyze the formation of PGH₂ from arachidonic acid (AA). Cox-1 and Cox-2 are isozymes of prostaglandin-endoperoxidase synthase (PTGS). Cox-1 is constitutively expressed in most tissues and is thought to serve in general housekeeping functions. Cox-2 is efficiently induced in migratory cells responding to pro-inflammatory stimuli and is considered to be an important mediator of inflammation. Both enzymes are targets for the nonsteroidal therapeutic anti-inflammatory drugs, NSAIDs. COX2 expression is significantly increased in 85-90% of human colorectal adenocarcinomas whereas levels of COX-1 are not changed.

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

Supplied As

200ug/ml of Ab produced in CHO cell mammalian-based expression system. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

Research Areas

Angiogenesis, Cardiovascular, Colon Cancer, Cytokine Signaling, Immunology, Lung Cancer, Neuroscience