

COX2 Monoclonal Antibody (SP21)

Product Details	
Size	500 µL
Species Reactivity	Human
Published Species	Dog, Rat, Bovine, Human, Mouse, Horse
Host/Isotype	Rabbit / IgG
Class	Monoclonal
Type	Antibody
Clone	SP21
Conjugate	Unconjugated
Immunogen	A synthetic peptide from C-terminus of rat cox2
Form	Liquid
Concentration	0.006 mg/mL
Purification	Protein A
Storage buffer	PBS, pH 7.2, with 1% BSA
Contains	0.1% sodium azide
Storage conditions	-20° C, Avoid Freeze/Thaw Cycles
RRID	AB_10984436

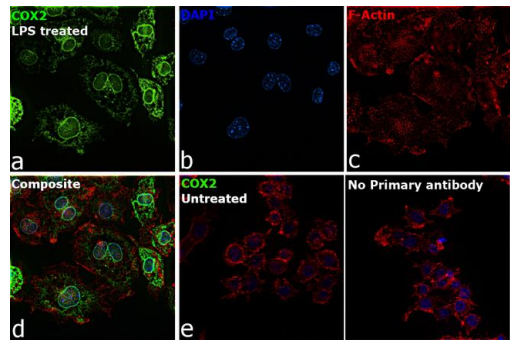
Applications	Tested Dilution	Publications
Western Blot (WB)	1:1,000	8 Publications
Immunohistochemistry (IHC)	-	39 Publications
Immunohistochemistry (Paraffin) (IHC (P))	1:100	9 Publications
Immunocytochemistry (ICC/IF)	1:100	6 Publications

Product Specific Information

MA5-14568 targets COX2 in IHC (P) applications and shows reactivity with Human samples.

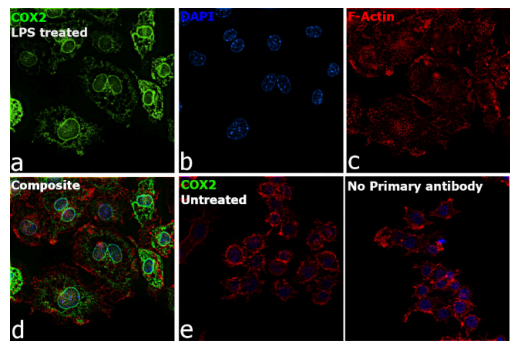
The MA5-14568 immunogen is a synthetic peptide from C-terminus of rat cox2.

Product Images For COX2 Monoclonal Antibody (SP21)



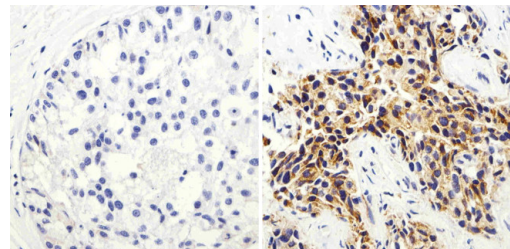
COX2 Antibody (MA5-14568)

Detection of altered expression of the target protein by cell treatment demonstrates antibody specificity. Immunofluorescence analysis of COX2 using Anti-COX2 Monoclonal Antibody (SP21) (Product # MA5-14568), shows increased expression of COX2 in RAW 264.7 cell line upon LPS treatment. {TM}



COX2 Antibody (MA5-14568) in ICC/IF

Immunofluorescence analysis of COX2 was performed using 70% confluent log phase RAW 264.7 cells treated with Lipopolysaccharide. The cells were fixed with 4% Paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 10 minutes, and blocked with 2% BSA for 10 minutes at room temperature. The cells were labeled with COX2 Monoclonal Antibody (SP21) (Product # MA5-14568) at 1:100 dilution in 0.1% BSA, incubated at 4 degree celsius overnight and then labeled with Goat anti-Rabbit IgG (Heavy Chain), Superclonal™ Recombinant Secondary Antibody, Alexa Fluor 488 (Product # A27034), (1:2000 dilution) for 45 minutes at room temperature (Panel a: Green). Nuclei (Panel b: Blue) were stained with SlowFade® Gold Antifade Mountant with DAPI (Product # S36938). F-actin (Panel c: Red) was stained with Rhodamine Phalloidin (Product # R415, 1:300). Panel d represents the merged image showing nuclear membrane and cytoplasmic localization. Panel e represents RAW 264.7 cells having no expression of COX2. Panel f represents control cells with no primary antibody to assess background. The images were captured at 60X magnification.



COX2 Antibody (MA5-14568) in IHC (P)

Immunohistochemistry analysis of COX2 showing staining in the cytoplasm and membrane of paraffin-embedded human breast carcinoma (right) compared to a negative control without primary antibody (left). To expose target proteins, antigen retrieval was performed using 10mM sodium citrate (pH 6.0), microwaved for 8-15 min. Following antigen retrieval, tissues were blocked in 3% H2O2-methanol for 15 min at room temperature, washed with ddH2O and PBS, and then probed with a COX2 monoclonal antibody (Product # MA5-14568) diluted in 3% BSA-PBS at a dilution of 1:20 overnight at 4°C in a humidified chamber. Tissues were washed extensively in PBST and detection was performed using an HRP-conjugated secondary antibody followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.

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Western Blot (8)

<p>Nutrients</p> <p>Protein Digests and Pure Peptides from Chia Seed Prevented Adipogenesis and Inflammation by Inhibiting PPAR and NF-B Pathways in 3T3L-1 Adipocytes.</p> <p>"Published figure using COX2 monoclonal antibody (Product # MA5-14568) in Western Blot"</p> <p>Authors: Grancieri M,Martino HSD,Gonzalez de Mejia E</p>	<p>Year 2021</p> <p>Species Mouse</p> <p>Dilution 1:500</p>
<p>Frontiers in immunology</p> <p>Autoimmune-Mediated Retinopathy in CXCR5-Deficient Mice as the Result of Age-Related Macular Degeneration Associated Proteins Accumulation.</p> <p>"MA5-14568 was used in Western Blotting to show that with age, CXCR5 mice develop retinal degeneration characterised by microglia dysfunction, increased production of CXCL13 in the RPE progressive photoreceptor and neuronal loss."</p> <p>Authors: Lennikov A,Saddala MS,Mukwaya A,Tang S,Huang H</p>	<p>Year 2020</p> <p>Species Mouse</p> <p>Dilution 1:1000</p>

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Immunohistochemistry (39)

<p>Experimental cell research</p> <p>NF-B activation in retinal microglia is involved in the inflammatory and neovascularization signaling in laser-induced choroidal neovascularization in mice.</p> <p>"MA5-14568 was used in Immunohistochemistry to indicate that NF-B activation in microglia and it's migration capacity is involved in the development of laser CNV in mice. Its suppression by NF-B inhibition might be a promising therapeutic strategy for wet AMD."</p> <p>Authors: Hikage F,Lennikov A,Mukwaya A,Lachota M,Ida Y,Utheim TP,Chen DF,Huang H,Ohguro H</p>	<p>Year 2021</p> <p>Species Mouse</p> <p>Dilution 1:100</p>
<p>TheScientificWorldJournal</p> <p>The Efficacy of Processing Strategies on the Gastroprotective Potentiality of <i>Chenopodium quinoa</i> Seeds.</p> <p>"MA5-14568 was used in Immunohistochemistry to evaluate the effect of different processing techniques on the 2,2-diphenyl-1-picrylhydrazyl (DPPH) scavenging capacity and the gastroprotective potential of Chenopodium quinoa red seeds in acute gastric injury induced by absolute ethanol in rats."</p> <p>Authors: Mariod AA,Salama SM</p>	<p>Year 2021</p> <p>Species Rat</p> <p>Dilution 1:100</p>

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More applications with references on thermofisher.com

- IHC (P) (9)
- ICC/IF (6)

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