

# Product Datasheet

## COX-2 Antibody NB100-689

Unit Size: 0.5 ml

Store at 4C. Do not freeze.

[www.novusbio.com](http://www.novusbio.com)



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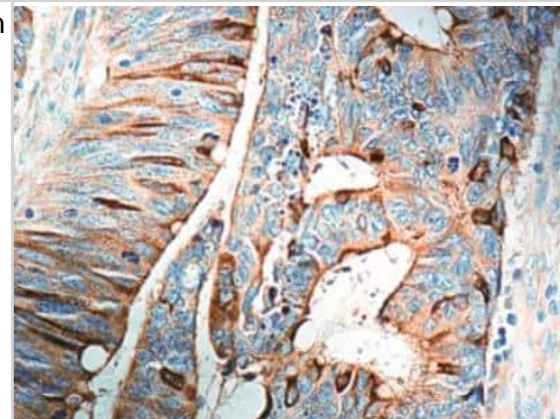
**NB100-689**

## COX-2 Antibody

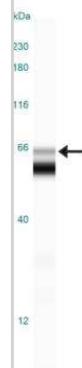
Product Information	
<b>Unit Size</b>	0.5 ml
<b>Concentration</b>	Please see the vial label for concentration. If unlisted please contact technical services.
<b>Storage</b>	Store at 4C. Do not freeze.
<b>Clonality</b>	Polyclonal
<b>Preservative</b>	0.05% Sodium Azide
<b>Isotype</b>	IgG
<b>Purity</b>	Affinity purified
<b>Buffer</b>	PBS (pH 7.4), 0.2% BSA, Tween-20
Product Description	
<b>Description</b>	Novus Biologicals Rabbit COX-2 Antibody (NB100-689) is a polyclonal antibody validated for use in IHC, WB and Simple Western. Anti-COX-2 Antibody: Cited in 35 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
<b>Host</b>	Rabbit
<b>Gene ID</b>	5743
<b>Gene Symbol</b>	PTGS2
<b>Species</b>	Human, Rat
<b>Specificity/Sensitivity</b>	This reacts with the 70 kDa protein.
<b>Immunogen</b>	Recombinant protein corresponding to the C-terminus of rat COX2 (the exact amino acid sequence is considered to be proprietary information).
Product Application Details	
<b>Applications</b>	Western Blot, Simple Western, Immunohistochemistry-Paraffin, Immunohistochemistry, Immunohistochemistry-Frozen
<b>Recommended Dilutions</b>	Western Blot 1:100-1:2000, Simple Western 1:100, Immunohistochemistry 1:50-1:100, Immunohistochemistry-Paraffin 1:50-1:100, Immunohistochemistry-Frozen
<b>Application Notes</b>	IHC-P: recommended pretreatment of citrate buffer, pH 6.0. Recommended incubation time of 30 min at RT. Use in Immunohistochemistry-Frozen reported in scientific literature (PMID: 31592103). See <a href="#">Simple Western Antibody Database</a> for Simple Western validation: Tested in Rat Brain, separated by Size, antibody dilution of 1:100, apparent MW was ~55-66 kDa

## Images

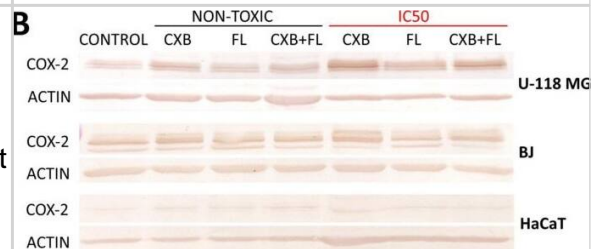
Immunohistochemistry-Paraffin: COX-2 Antibody [NB100-689] - Formalin fixed paraffin embedded colon carcinoma stained with COX-2 antibody (NB100-689).



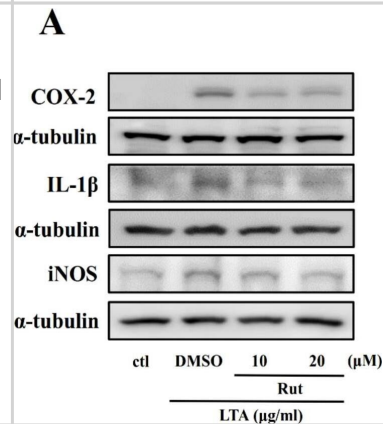
Simple Western: COX-2 Antibody [NB100-689] - Simple Western lane view shows a specific band for COX2 in 1.0 mg/ml of Rat Brain at an antibody concentration of 1:100. This experiment was performed under reducing conditions using the 12-230 kDa separation system. Image provided through customer review.



(A) The COX-2 level in U-118 MG, BJ, and HaCaT cells after 24 h treatment with CXB, FL, or CXB+FL mixture at non-toxic concentrations and IC50. Results are presented as medians expressed as percent of non-treated control. The whiskers are lower (25%) and upper (75%) quartile ranges. Symbol \* shows statistically significant difference against control,  $p < 0.05$ , Kruskal–Wallis test. (B) Image of immunoblots. Image collected and cropped by CiteAb from the following open publication (<https://www.mdpi.com/1422-0067/25/6/3226>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Effects of Rut on the expression of cyclooxygenase-2 (COX-2), interleukin-1 beta (IL-1 $\beta$ ), and inducible nitric oxide synthase (iNOS) in LTA-stimulated RAW cells. (A–D) Cells were pretreated with Rut (10 and 20  $\mu$ M) for 20 min and then stimulated by LTA (10  $\mu$ g/mL) for 24 h. The levels of (B) COX-2 (C) IL-1 $\beta$  and (D) iNOS protein expression were evaluated as described in the Methods section. Data are presented as the means  $\pm$  SEM ( $n = 4$ ); \*  $p < 0.05$ , \*\*  $p < 0.01$ , and \*\*\*  $p < 0.001$ , compared with the control group; #  $p < 0.05$  and ##  $p < 0.01$ , compared with the LTA group. Image collected and cropped by CiteAb from the following open publication (<https://pubmed.ncbi.nlm.nih.gov/35682568>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



## Publications

Montecillo-Aguado M, Tirado-Rodriguez B, Antonio-Andres G et al. Omega-6 Polyunsaturated Fatty Acids Enhance Tumor Aggressiveness in Experimental Lung Cancer Model: Important Role of Oxylipins International Journal of Molecular Sciences 2022-05-31 [PMID: 35682855]

Dib S, Loiola RA, Sevin E et al. TNF $\alpha$  Activates the Liver X Receptor Signaling Pathway and Promotes Cholesterol Efflux from Human Brain Pericytes Independently of ABCA1 International journal of molecular sciences 2023-03-22 [PMID: 36983062] (Western Blot, Human)

Lin FL, Cheng YW, Chen LH et al. Retinal protection by fungal product theissenolactone B in a sodium iodate-induced AMD model through targeting retinal pigment epithelial matrix metalloproteinase-9 and microglia activity Biomedicine & pharmacotherapy = Biomedecine & pharmacotherapie 2022-12-17 [PMID: 36535199] (WB, Mouse)

PeNa-Mercado E, Garcia-Lorenzana M, Huerta-Yepez S et al. Effect of melatonin on electrical impedance and biomarkers of damage in a gastric ischemia/reperfusion model PloS one 2022-08-16 [PMID: 35972989] (IHC-P, Rat)

### Details:

Dilution used for IHC-P 1:1000

Jayakumar T, Yang CM, Yen TL et al. Anti-Inflammatory Mechanism of An Alkaloid Rutaecarpine in LTA-Stimulated RAW 264.7 Cells: Pivotal Role on NF-kappaB and ERK/p38 Signaling Molecules International journal of molecular sciences 2022-05-24 [PMID: 35682568] (WB, Mouse)

Ham HJ, Lee YS, Lee HP et al. G721-0282 Exerts Anxiolytic-Like Effects on Chronic Unpredictable Mild Stress in Mice Through Inhibition of Chitinase-3-Like 1-Mediated Neuroinflammation Frontiers in cellular neuroscience 2022-03-07 [PMID: 35345530] (WB, Mouse)

Balde A, Raghavender P, Dasireddy S et al. Crab Pentapeptide and Its Anti-inflammatory Activity on Macrophage Cells International Journal of Peptide Research and Therapeutics 2021-09-08 (WB)

Eduardo P, Mario G, Carlos CEsar P et al. Bioelectric, tissue, and molecular characteristics of the gastric mucosa at different times of ischemia Experimental Biology and Medicine 2021-06-15 [PMID: 34130514]

Ham HJ, Lee YS, Yun J et al. K284-6111 alleviates memory impairment and neuroinflammation in Tg2576 mice by inhibition of Chitinase-3-like 1 regulating ERK-dependent PTX3 pathway Aging (Albany NY) 2020-11-07 [PMID: 33222690] (IF/IHC, Human)

Joshi I, Mohideen HS, Nazeer RA A Meretrix meretrix visceral mass derived peptide inhibits lipopolysaccharide-stimulated responses in RAW264.7 cells and adult zebrafish model Int Immunopharmacol 2020-11-10 [PMID: 33187909]

Sukumaran V, Tsuchimochi H et al. Liraglutide Improves Renal Endothelial Function in Obese Zucker Rats on a High-Salt Diet. J Pharmacol Exp Ther 2019-01-06 [PMID: 30910920] (WB, Rat)

Jain S, Samal AG, Das B et al. Escherichia coli, a common constituent of benign prostate hyperplasia-associated microbiota induces inflammation and DNA damage in prostate epithelial cells Prostate 2020-08-24 [PMID: 32835423]

More publications at <http://www.novusbio.com/NB100-689>





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### **Products Related to NB100-689**

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NB820-59432	Human Lung Whole Tissue Lysate (Adult Whole Tumor)
NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

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### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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