

# Product Datasheet

## B7-2/CD86 Antibody (BU63)

### NBP2-25208

Unit Size: 0.1 mg

Store at 4C.

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Updated 10/23/2024 v.20.1

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**NBP2-25208**

B7-2/CD86 Antibody (BU63)

Product Information	
Unit Size	0.1 mg
Concentration	0.2 mg/ml
Storage	Store at 4C.
Clonality	Monoclonal
Clone	BU63
Preservative	0.05% Sodium Azide
Isotype	IgG1 Kappa
Purity	Protein A or G purified
Buffer	10 mM PBS with 0.05% BSA
Target Molecular Weight	70 kDa

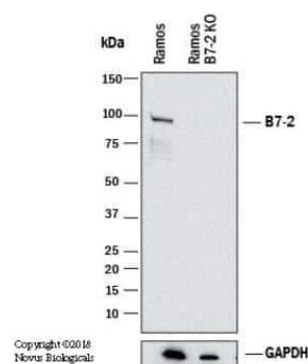
Product Description	
Description	200ug/ml of antibody purified from Bioreactor Concentrate by Protein A or G. Prepared in 10 mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0 mg/ml. (NBP2-34569)  Antibody with azide - store at 2 to 8C. Antibody without azide - store at -20 to -80C.
Host	Mouse
Gene ID	942
Gene Symbol	CD86
Species	Human, Mouse, Rat
Marker	Dendritic Cells Maturation Marker
Immunogen	ARH-77 (B-lymphoblastoid cell line)

Product Application Details	
Applications	Western Blot, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin, Knockout Validated
Recommended Dilutions	Western Blot 0.5-1ug/ml, Flow Cytometry 1-2 ug/million cells, Immunohistochemistry 0.5-1ug/ml, Immunocytochemistry/ Immunofluorescence 1-2 ug/ml, Immunohistochemistry-Paraffin 2-4 ug/ml, Immunohistochemistry-Frozen, Knockout Validated
Application Notes	Immunohistochemistry (Formalin-fixed): 2-4ug/ml for 30 minutes at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris buffer with 1mM EDTA, pH 9.0, for 45 min at 95C followed by cooling at RT for 20 minutes. Optimal dilution for a specific application should be determined. IHC-fr reported in the literature (PMID: 29867472, 31629891)

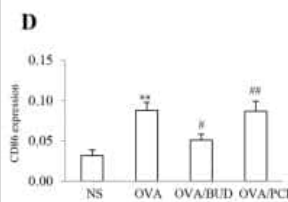


## Images

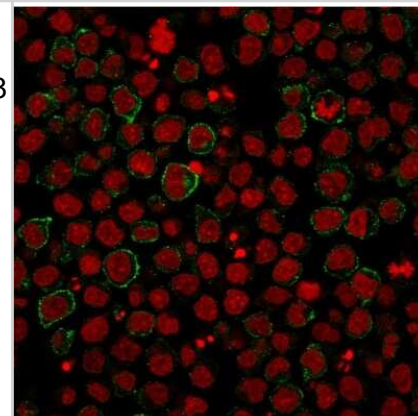
Knockout Validated: B7-2/CD86 Antibody (BU63) [NBP2-25208] - Western blot shows lysates of Ramos human Burkitt's lymphoma parental cell line and B7-2 knockout (KO) Ramos cell line. PVDF membrane was probed with 1.0 ug/mL of Mouse Anti-Human B7-2 Monoclonal Antibody (Catalog # NBP2-25208) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog #HAF018). Specific band was detected for B7-2 at approximately 90 kDa (as indicated) in the parental Ramos cell line, but is not detectable in the knockout Ramos cell line. This experiment was conducted under reducing conditions.



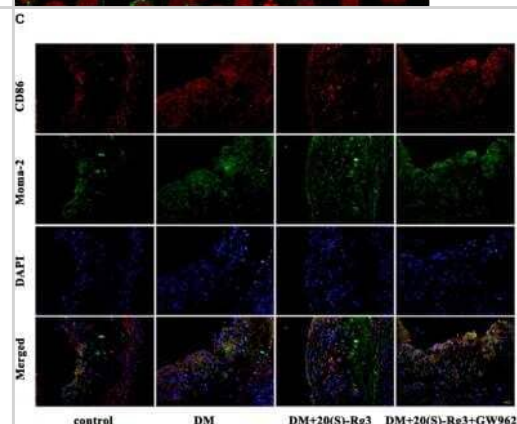
Immunohistochemistry: B7-2/CD86 Antibody (BU63) [NBP2-25208] - Macrophage polarization states. Distribution and proportion of CD86+ macrophages (brown) were identified using IHC procedures. Intensity for the color response to antibodies was visible in lung tissues from all groups. Population proportions for the stained cells as shown by red arrows were calculated as a fold change of the control. (d). The results were expressed as Mean +/- SD (n = 3). \*\*: a p-value of < 0.01 vs NS, OVA/BUD and OVA/PCI except the number of CD86+ cells in OVA/PCI group. #: P < 0.05 vs NS and ##; P < 0.01 vs either NS or OVA/BUD group. Image collected and cropped by CiteAb from the following publication (<https://respiratory-research.biomedcentral.com/articles/10.1186/s12931-020-1322-5>) licensed under a CC-BY license.



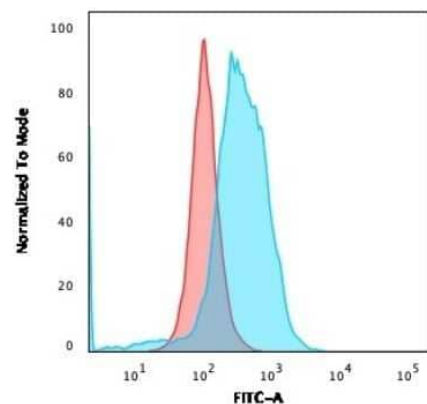
Immunocytochemistry/Immunofluorescence: B7-2/CD86 Antibody (BU63) [NBP2-25208] - Immunofluorescence staining of PFA-fixed Ramos cells using followed by goat anti-Mouse IgG conjugated to CF488 (green). Nuclei are stained with Red Dot.



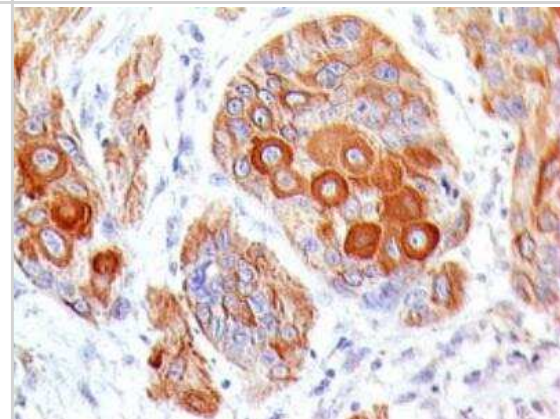
Immunohistochemistry: B7-2/CD86 Antibody (BU63) [NBP2-25208] - Effects of 20(S)-Rg3 on macrophage polarization in atherosclerotic lesions of diabetic ApoE<sup>-/-</sup> mice. Co-immunofluorescence staining for macrophage (anti-Moma-2 antibody, green), M1 marker CD86 (red) and DAPI (blue) (n = 5, respectively). Scale bar: 20 um. Image collected and cropped by CiteAb from the following publication (<https://www.frontiersin.org/articles/10.3389/fphar.2018.00464/full>) licensed under a CC-BY license.



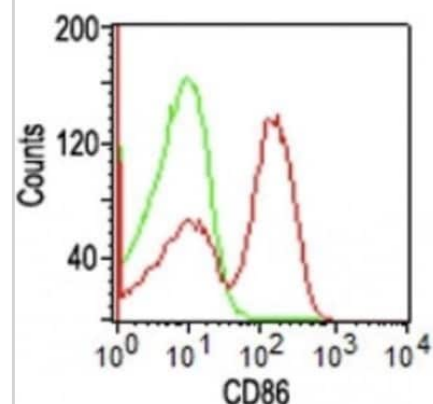
Flow Cytometry: B7-2/CD86 Antibody (BU63) [NBP2-25208] - Flow Cytometric Analysis of PFA-fixed Ramos cells. B7-2/CD86 Antibody (BU63) followed by goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red).



Immunohistochemistry-Paraffin: B7-2/CD86 Antibody (BU63) [NBP2-25208] - Formalin-fixed, paraffin-embedded esophagus tumor tissue stained with CD86 antibody (5 ug/ml), peroxidase-conjugate and DAB chromogen. Note strong staining of differentiated squamous cells. TMA was used for this test.



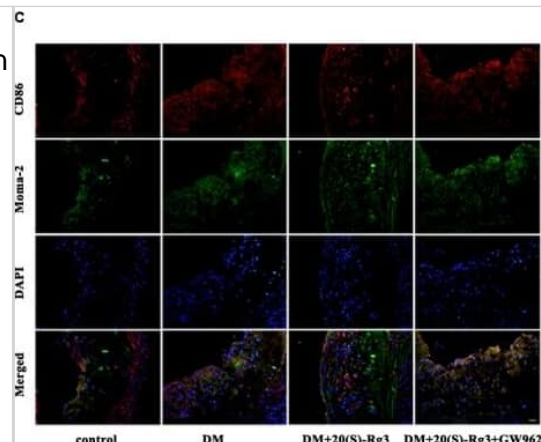
Flow Cytometry: B7-2/CD86 Antibody (BU63) [NBP2-25208] - Flow Cytometric Analysis of human PBMCs using B7-2/CD86 Antibody (BU63); Goat anti-Mouse IgG-CF488 (red); Isotype Control (green).



Immunohistochemistry: B7-2/CD86 Antibody (BU63) [NBP2-25208] - Macrophage polarization states. Distribution & proportion of CD68+ (a), CD86+ (c) & CD163+ (e) macrophages (brown) were identified using IHC procedures. Intensity for the color response to antibodies was visible in lung tissues from all groups. Population proportions for the stained cells as shown by red arrows were calculated as a fold change of the control. (b, d, f). The results were expressed as Mean  $\pm$  SD (n = 3). \*\*: a p-value of < 0.01 vs NS, OVA/BUD & OVA/PCI except the number of CD86+ cells in OVA/PCI group. #: P < 0.05 vs NS & ##; P < 0.01 vs either NS or OVA/BUD group Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/32111211>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Immunocytochemistry/ Immunofluorescence: B7-2/CD86 Antibody (BU63) [NBP2-25208] - Effects of 20(S)-Rg3 on macrophage polarization in atherosclerotic lesions of diabetic ApoE<sup>-/-</sup> mice. (A,B) Co-immunofluorescence staining of the aortic root for macrophage (anti-Moma-2 antibody, green) & M1 marker iNos (red), & a bar graph summarizing the results (n = 5, respectively). (C,D) Co-immunofluorescence staining for macrophage (anti-Moma-2 antibody, green) & M1 marker CD86 (red), & a bar graph summarizing the results (n = 5, respectively). Scale bar: 20  $\mu$ m. Data are mean  $\pm$  SEM.  $\square$  p < 0.05,  $\square\square$  p < 0.01,  $\square\square\square$  p < 0.001. Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/29867472>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



## Publications

Shi C, Zhang Y, Wu G et al. Hyaluronic Acid-Based Reactive Oxygen Species-Responsive Multifunctional Injectable Hydrogel Platform Accelerating Diabetic Wound Healing *Advanced healthcare materials* 2023-11-09 [PMID: 37943252]

W B, Chen Y, Chang H et al. Zinc oxide nanoparticles exacerbate skin epithelial cell damage by upregulating the NLRP3 inflammasome and exosome secretion in M1 macrophages after UVB irradiation-induced skin injury *Research Square* 2023-09-15 (IHC-P, Mouse)

Luo Y, Ali T, Liu Z et al. EPO prevents neuroinflammation and relieves depression via JAK/STAT signaling *Life Sciences* 2023-09-01 [PMID: 37769806] (WB, Mouse)

Jia H, Wei P, Zhou S et al. Attenuated Salmonella carrying siRNA-PD-L1 and radiation combinatorial therapy induces tumor regression on HCC through T cell-mediated immuno-enhancement *Cell Death Discovery* 2023-08-28 [PMID: 37640735] (Immunocytochemistry/ Immunofluorescence)

Tan Y, Coyle RC, Barrs RW et al. Nanowired human cardiac organoid transplantation enables highly efficient and effective recovery of infarcted hearts *Science Advances* 2023-08-04 [PMID: 37540743]

Chen S, Xing Z, Geng M et al. Macrophage fusion event as one prerequisite for inorganic nanoparticle-induced antitumor response *Science advances* 2023-07-21 [PMID: 37467339] (IHC-P, Mouse)

Chen L, Song X, Yao Z et al. Gelatin nanofiber-reinforced decellularized amniotic membrane promotes axon regeneration and functional recovery in the surgical treatment of peripheral nerve injury *Biomaterials* 2023-09-01 [PMID: 37352606] (IHC-P)

Tan X, Fang P, Li K et al. A HER2-targeted antibody-novel DNA topoisomerase I inhibitor conjugate induces durable adaptive antitumor immunity by activating dendritic cells *mAbs* 2023-06-14 [PMID: 37314961] (IHC-P, Human)

Details:  
1:200 dilution

Yao S, Zhou Z, Wang L et al. Targeting endometrial inflammation in intrauterine adhesion ameliorates endometrial fibrosis by priming MSCs to secrete C1INH *iScience* 2023-06-01 [PMID: 37456855]

Ling Q, Fang J, Zhai C et al. Berberine induces SOCS1 pathway to reprogram the M1 polarization of macrophages via miR-155-5p in colitis-associated colorectal cancer *European journal of pharmacology* 2023-04-13 [PMID: 37059377]

Li K, Xu W, Chen Y et al. Piezoelectric Nanostructured Surface for Ultrasound-Driven Immunoregulation to Rescue Titanium Implant Infection *Advanced Functional Materials* 2023-04-18

Wang B, Chen Y, Chang H et al. Zinc Oxide Nanoparticles Exacerbate Skin Epithelial Cell Damage by Activating M1 Macrophages by Upregulating the Nlrp3 Inflammasome and Exosome Secretion after Uvb Irradiation-Induced Skin Injury *SSRN Electronic Journal* 2023-02-22 (IHC-P, Mouse)

More publications at <http://www.novusbio.com/NBP2-25208>



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### **Products Related to NBP2-25208**

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HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
NBP1-43319-0.5mg	Mouse IgG1 Kappa Isotype Control (P3.6.2.8.1)
NBP2-77486-50ug	Recombinant Human B7-2/CD86 His Protein

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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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