Product Datasheet

CCR2 Antibody (3G7) - BSA Free
NBP2-35334

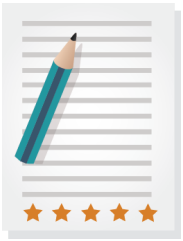
Unit Size: 0.1 mg

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

Reviews: 1 Publications: 11

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:
www.novusbio.com/NBP2-35334

Updated 9/9/2025 v.20.1



NBP2-35334

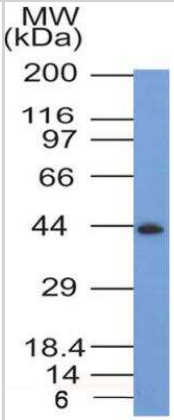
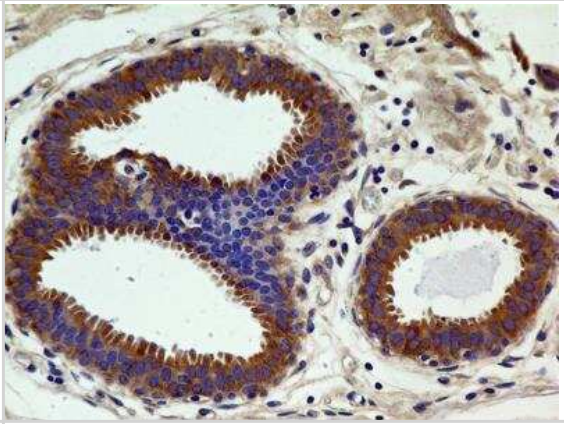
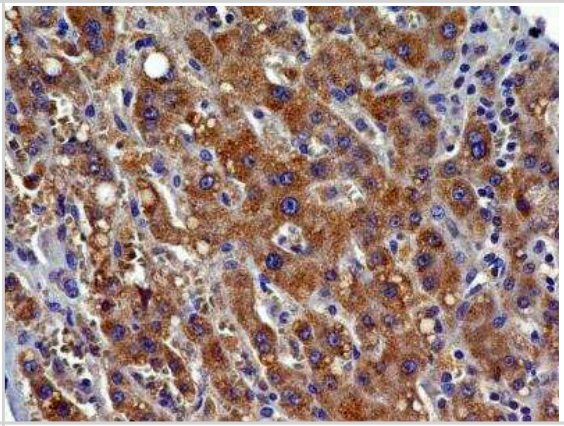
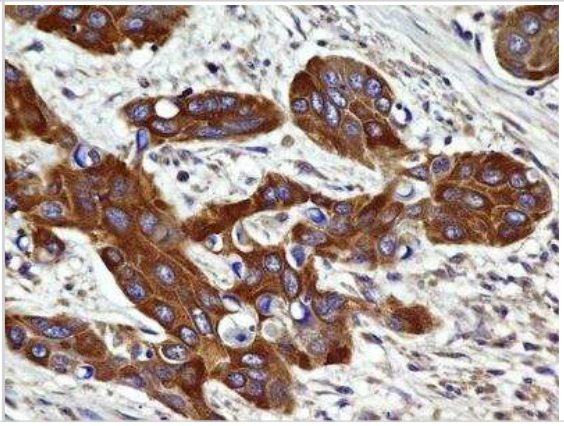
CCR2 Antibody (3G7) - BSA Free

Product Information	
Unit Size	0.1 mg
Concentration	1.0 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	3G7
Preservative	0.05% Sodium Azide
Isotype	IgG2b Lambda
Purity	Protein G purified
Buffer	PBS

Product Description	
Description	Novus Biologicals Mouse CCR2 Antibody (3G7) - BSA Free (NBP2-35334) is a monoclonal antibody validated for use in IHC, WB and ICC/IF. Anti-CCR2 Antibody: Cited in 10 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Mouse
Gene ID	729230
Gene Symbol	CCR2
Species	Human, Mouse
Reactivity Notes	Mouse reactivity reported in scientific literature (PMID: 30213824).
Immunogen	A synthetic peptide made to an N-terminal portion of the human CD63 protein (between residues 1-100) [UniProt P41597]

Product Application Details	
Applications	Western Blot, Immunohistochemistry-Paraffin, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry
Recommended Dilutions	Western Blot 2 ug/ml, Immunohistochemistry 5 ug/ml, Immunocytochemistry/ Immunofluorescence reported in scientific literature (PMID 34274535), Immunohistochemistry-Paraffin 5 ug/ml

Images

Western Blot: CCR2 Antibody (3G7) [NBP2-35334] - Western blot analysis of CCR2 [3G7] in Molt4 lysate.	
Immunohistochemistry-Paraffin: CCR2 Antibody (3G7) [NBP2-35334] - IHC analysis of formalin-fixed paraffin-embedded tissue section of human breast using CCR2 antibody (clone 3G7) at 5 ug/ml concentration. The glandular cells in the lobules showed a specific cytoplasmic-membranous immunostaining of CCR2.	
Immunohistochemistry-Paraffin: CCR2 Antibody (3G7) [NBP2-35334] - IHC analysis of formalin-fixed paraffin-embedded tissue section of human HCC (hepatocellular carcinoma / malignant hepatoma) using CCR2 antibody (clone 3G7) at 5 ug/ml concentration. The cancer cells depicted specific punctate to diffused cytoplasmic-membranous immuno-staining of CCR2 protein.	
Immunohistochemistry-Paraffin: CCR2 Antibody (3G7) [NBP2-35334] - IHC analysis of formalin-fixed paraffin-embedded tissue section of human esophageal squamous cell carcinoma (SCC) using CCR2 antibody (clone 3G7) at 5 ug/ml concentration. The cancer cells depicted specific cytoplasmic-membranous immunostaining, whereas the cells of tumor stroma were largely negative for CCR2 immunopositivity.	

Publications

Alghamdi TA, Batchu SN, Hadden MJ, et al. Histone H3 Serine 10 Phosphorylation Facilitates Endothelial Activation in Diabetic Kidney Disease Diabetes 2018-12-01 [PMID: 30213824] (Western Blot, Human)

Liu Z, Geng Y, Huang Y et al. Bushen Antai Recipe Alleviates Embryo Absorption by Enhancing Immune Tolerance and Angiogenesis at Maternal-Fetal Interface Via Mobilizing Mdscs in Abortion-Prone Mice SSRN 2023-06-24 [PMID: 37952407] (WB, IHC, Mouse)

Liu Z, Song Y, Hu R et al. Bushen Antai recipe ameliorates immune microenvironment and maternal-fetal vascularization in STAT3-deficient abortion-prone mice Journal of ethnopharmacology 2023-07-08 [PMID: 37423519] (WB, Mouse)

Li R, Wu X, Peng S et al. CCR2 antagonist represses fibroblast-like synoviocyte-mediated inflammation in patients with rheumatoid arthritis International immunopharmacology 2023-06-28 [PMID: 37390649]

Ma K, Singh G, Wang J et al. Targeting Vascular Endothelial Growth Factor Receptors as a Therapeutic Strategy for Osteoarthritis and Associated Pain International Journal of Biological Sciences 2023-01-03 [PMID: 36632459] (IHC-P, Mouse)

Details:
Dilution used in IHC-P 1:100

Oz HH, Cheng EC, Di Pietro C et al. Recruited monocytes/macrophages drive pulmonary neutrophilic inflammation and irreversible lung tissue remodeling in cystic fibrosis Cell reports 2022-12-13 [PMID: 36516754] (IHC-P, Mouse)

Details:
Dilution used in IHC-P 1:100

Sung PS, Yang SP, Peng YC et al. CLEC5A and TLR2 are critical in SARS-CoV-2-induced NET formation and lung inflammation Journal of biomedical science 2022-07-11 [PMID: 35820906] (IHC-P, Mouse)

Han B, Alonso-Valenteen F, Wang Z Et Al. A Chemokine Regulatory Loop Induces Cholesterol Synthesis in Lung-Colonizing Triple-Negative Breast Cancer Cells to Fuel Metastatic Growth Molecular therapy : the journal of the American Society of Gene Therapy 2021-07-15 [PMID: 34274535] (IHC-P, ICC/IF)

Wenstedt EF, Verberk SG, Kroon J, et al. Salt increases monocyte CCR2 expression and inflammatory responses in humans JCI Insight 2019-11-01 [PMID: 31672939] (IHC-P, Human)

Alghamdi TA, Batchu SN, Hadden MJ, et al. Histone H3 Serine 10 Phosphorylation Facilitates Endothelial Activation in Diabetic Kidney Disease Diabetes 2018 Dec 01 [PMID: 30213824] (WB, Mouse)

Zhang Yun, Liu Shaohua, Qu Daiwei et al. Kif4A mediate the accumulation and reeducation of THP-1 derived macrophages via regulation of CCL2-CCR2 expression in crosstalking with OSCC. Sci Rep 2017-01-01 [PMID: 28533507] (WB, Human)

Procedures

Western Blot protocol for CCR2 Antibody (NBP2-35334)

Western Blot Protocol

1. Perform SDS-PAGE on samples to be analyzed, loading 25 ug of total protein per lane.
2. Transfer proteins to membrane according to the instructions provided by the manufacturer of the membrane and transfer apparatus.
3. Stain according to standard Ponceau S procedure (or similar product) to assess transfer success, and mark molecular weight standards where appropriate.
4. Rinse the blot.
5. Block the membrane using standard blocking buffer for at least 1 hour.
6. Wash the membrane in wash buffer three times for 10 minutes each.
7. Dilute anti-CCR2 primary antibody in blocking buffer and incubate 1 hour at room temperature.
8. Wash the membrane in wash buffer three times for 10 minutes each.
9. Apply the diluted HRP conjugated secondary antibody in blocking buffer (as per manufacturers instructions) and incubate 1 hour at room temperature.
10. Wash the blot in wash buffer three times for 10 minutes each (this step can be repeated as required to reduce background).
11. Apply the detection reagent of choice in accordance with the manufacturers instructions.

Note: Tween-20 can be added to the blocking or antibody dilution buffer at a final concentration of 0.05-0.2%.

Immunohistochemistry-Paraffin protocol for CCR2 Antibody (NBP2-35334)

1. Deparaffinize the tissue sections by immersing the slides in Xylene with two changes for 10 min each. Sections should not get dried at any stage from this point.
2. Rehydrate the tissue sections by immersing the slides in decreasing grades of ethanol as follows:
 a. Immerse in 100% ethanol with 2 changes for 5 minutes each
 b. Immerse in 95% ethanol with 2 changes for 5 minutes each
 c. Immerse in 90% ethanol for 5 minutes
 d. Immerse in 70% ethanol for 5 minutes
 e. Immerse in 50% ethanol for 5 minutes
 f. Immerse in distilled water for 5 minutes
3. Antigen Retrieval (Microwave Method):
 a. Immerse the slides in a microwave compatible tray containing 10 mM Sodium Citrate buffer (pH 6.0) with 0.05% Tween 20.
 b. Boil the slides and maintain the sub-boiling temperature for 5 minutes in the microwave. Thereafter, take out the tray very carefully and cool it at room temperature (RT) for about 30 minutes.
 c. Wash the slides 3 times, 3 minutes each by immersing them in TBST (Tris Buffered Saline having 0.05% Tween 20).
4. Quenching of Endogenous Peroxidase:
 a. Incubate the slides in 3% hydrogen peroxide prepared in methanol for 15 minutes (at RT, in dark conditions).
 b. Wash the slides in TBST 3 times, 3 minutes each.
5. Protein Blocking:
 a. Incubate the sections with background sniper solution at RT for 15 minutes (Biocare Medicals, USA).
 b. Wash the sections 3 times, 3 min each by immersing the slides in TBST.
6. Primary Antibody:
 a. Dilute the primary antibody at 5ug/ml concentration using PBS as a diluent.
 b. Incubate the sections with diluted primary antibody for 90 minutes at RT in a humidified chamber.
 c. Thereafter, wash the slides 4 times, 5 minutes each with TBST.
7. Probe (Secondary Reagent):
 a. Incubate with MACH 1 Mouse probe for 15 minutes at RT.
 b. Incubate for 30 min at room temperature with HRP-Polymer (Biocare Medical, USA).
 c. Wash the slides with TBST 4 times, 5 minutes each
8. Chromogen:
 a. Mix 32ul of DAB Chromogen with 1 ml of DAB substrate buffer (Biocare Medical, USA).
 b. Apply 200ul DAB mixture/section and incubate at RT in dark conditions (few seconds - 5 minutes).
 c. As soon as an appropriate color develops, rinse the slides with deionized water (2-3 brief rinses).
9. Counter stain:
 a. Counter stain with Hematoxylin for 30 seconds (Vector Labs, USA).
 b. Wash in deionized water for 1-2 minutes to clear the extra stain.
 c. Incubate the slides in bluing solution or Scott's water twice for 2 minutes each time.
10. Dehydrate the sections in increasing grades of alcohols:
 a. 50% alcohol for 1 minute
 b. 70% for 1 minute
 c. 90% for 1 minute
 d. 95% for 1 minute
 e. 100% for 1 minute
 f. Xylene with 2 changes for 2 minutes each
11. Mount with DPX mount and cover-slip glass (Fisher Scientific, USA), carefully not allowing any air bubbles to enter.

NOTE:- This protocol is provided as a reference tool only. Depending upon the type of tissues /tissue processing and reagents employed, the end user will need to optimize the final conditions for achieving an expected staining.

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Products Related to NBP2-35334

NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB7539	Goat anti-Mouse IgG (H+L) Secondary Antibody [HRP]
NBP1-48338PEP	CCR2 Antibody Blocking Peptide

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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