Product Datasheet

GPR18 Antibody - BSA Free
NBP2-24918

Unit Size: 0.1 mg

Store at -20C. Avoid freeze-thaw cycles.

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Reviews: 1 Publications: 5

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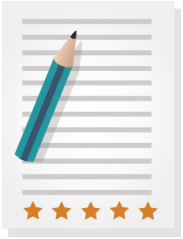
Updated 10/23/2024 v.20.1



NBP2-24918

GPR18 Antibody - BSA Free

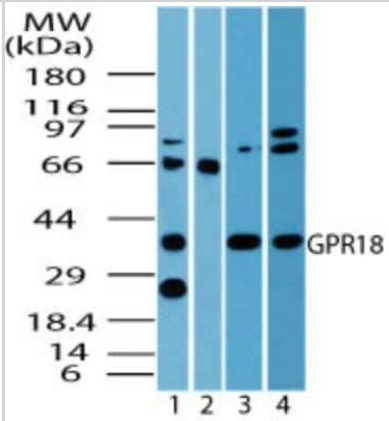
Product Information	
Unit Size	0.1 mg
Concentration	1.0 mg/ml
Storage	Store at -20C. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS

Product Description	
Host	Rabbit
Gene ID	2841
Gene Symbol	GPR18
Species	Human, Mouse, Rat
Immunogen	Partial synthetic peptide made to an N-terminal portion of the human GPR18 protein (between amino acids 1-50) [UniProt Q14330]

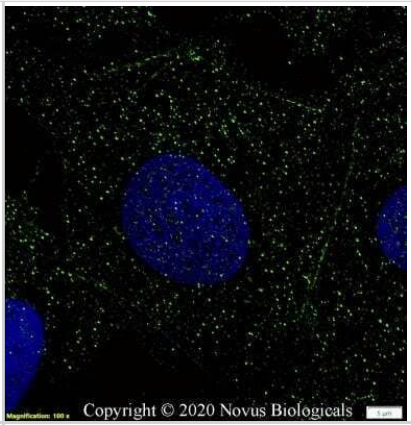
Product Application Details	
Applications	Western Blot, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot 2 ug/ml, Flow Cytometry reported in scientific literature (PMID 27256622), Immunohistochemistry 1:200, Immunocytochemistry/ Immunofluorescence 2 - 10 ug/ml. Use reported in scientific literature (PMID 30894369), Immunohistochemistry-Paraffin 1:200

Images

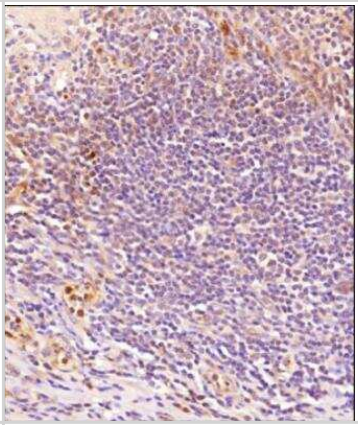
Western Blot: GPR18 Antibody [NBP2-24918] - Analysis of human spleen lysate (4 ug/mL) in the 1) absence and 2) presence of immunizing peptide 3) mouse spleen (6 ug/mL) and 4) rat spleen lysate (3 ug/mL) using GPR18 antibody.



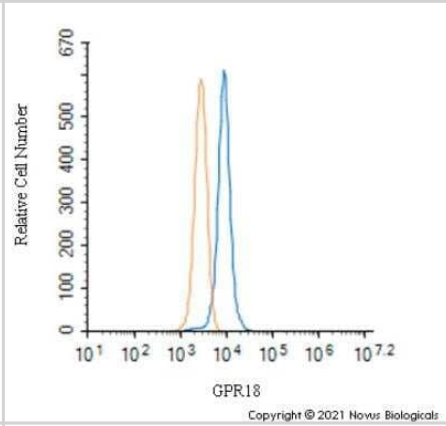
Immunocytochemistry/Immunofluorescence: GPR18 Antibody [NBP2-24918] - Ntera2 cells were fixed in 4% paraformaldehyde for 10 minutes and permeabilized in 0.05% Triton X-100 in PBS for 5 minutes. The cells were incubated with anti-GPR18 Antibody NBP2-24918 at 2 ug/ml overnight at 4C and detected with an anti-rabbit Dylight 488 (Green) at a 1:1000 dilution for 60 minutes. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 100X objective and digitally deconvolved.



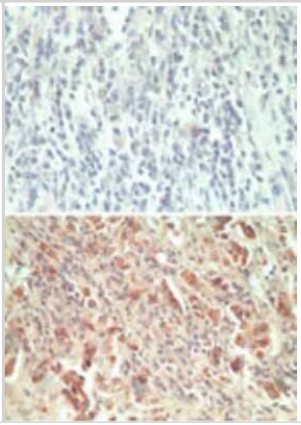
Immunohistochemistry-Paraffin: GPR18 Antibody [NBP2-24918] - Analysis of a FFPE tissue section of human tonsil using 1:200 dilution of GPR18 antibody. The staining was developed using HRP labeled anti-rabbit secondary antibody and DAB reagent, and nuclei of cells were counter-stained with hematoxylin.

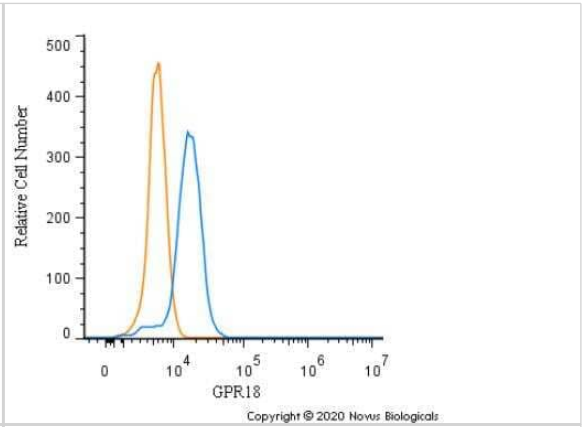
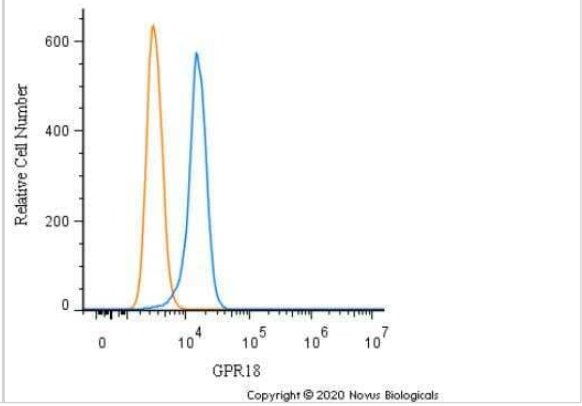


Flow Cytometry: GPR18 Antibody [NBP2-24918] - An intracellular stain was performed on Daudi cells with GPR18 Antibody NBP2-24918 (blue) and a matched isotype control NBP2-24891 (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 1.0 ug/mL for 30 minutes at room temperature, followed by Rabbit IgG (H+L) Cross-Adsorbed Secondary Antibody, Dylight 550 (SA5-10033, Thermo Fisher).



Immunohistochemistry-Paraffin: GPR18 Antibody [NBP2-24918] - Analysis of human breast tumor tissue using an isotype control (top) and GPR18 antibody (bottom) at 5 ug/mL.



Flow Cytometry: GPR18 Antibody [NBP2-24918] - An intracellular stain was performed on Ntera2 cells with GPR18 Antibody NBP2-24918 (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 1.0 ug/mL for 30 minutes at room temperature, followed by Rabbit IgG (H+L) Cross-Adsorbed Secondary Antibody, Dylight 550 (SA5-10033, Thermo Fisher).	
Flow Cytometry: GPR18 Antibody [NBP2-24918] - An intracellular stain was performed on THP-1 cells with GPR18 Antibody NBP2-24918 (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 1.0 ug/mL for 30 minutes at room temperature, followed by Rabbit IgG (H+L) Cross-Adsorbed Secondary Antibody, Dylight 550 (SA5-10033, Thermo Fisher).	

Publications

Anghelache M, Voicu G, Deleanu M et al. Biomimetic Nanocarriers of Pro-Resolving Lipid Mediators for Resolution of Inflammation in Atherosclerosis Advanced healthcare materials 2023-10-18 [PMID: 37852632] (FLOW, Mouse)

Alqahtani S, Xia L, Jannasch A Et al. Disruption of pulmonary resolution mediators contribute to exacerbated silver nanoparticle-induced acute inflammation in a metabolic syndrome mouse model Toxicology and applied pharmacology 2021-11-15 [PMID: 34601004]

Sharma M, Schlegel MP, Afonso MS et al Regulatory T Cells License Macrophage Pro-Resolving Functions During Atherosclerosis Regression Circ Res 2020-04-28 [PMID: 32336197] (ICC/IF, ICC/IF, Mouse)

Details:
Citation using the DyLight 650 version of this antibody.

Croasdell A, Sime PJ, Phipps RP Resolvin D2 decreases TLR4 expression to mediate resolution in human monocytes FASEB J. 2016-09-30 [PMID: 27256622] (FLOW, Human)

Bhatia S, Oweida A, Lennon S et al. Inhibition of EphB4-ephrin-B2 signaling reprograms the tumor immune microenvironment in head and neck cancers Cancer Res. 2019-03-20 [PMID: 30894369] (ICC/IF, Human)

Procedures

Western Blot Protocol for GPR18 Antibody (NBP2-24918)
Western Blot Protocol

1. Perform SDS-PAGE on samples to be analyzed, loading 10-25 ug of total protein per lane.
2. Transfer proteins to PVDF membrane according to the instructions provided by the manufacturer of the membrane and transfer apparatus.
3. Stain the membrane with Ponceau S (or similar product) to assess transfer success, and mark molecular weight standards where appropriate.
4. Rinse the blot TBS -0.05% Tween 20 (TBST).
5. Block the membrane in 5% Non-fat milk in TBST (blocking buffer) for at least 1 hour.
6. Wash the membrane in TBST three times for 10 minutes each.
7. Dilute primary antibody in blocking buffer and incubate overnight at 4C with gentle rocking.
8. Wash the membrane in TBST three times for 10 minutes each.
9. Incubate the membrane in diluted HRP conjugated secondary antibody in blocking buffer (as per manufacturer's instructions) for 1 hour at room temperature.
10. Wash the blot in TBST 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.

Immunocytochemistry/Immunofluorescence Protocol for GPR18 Antibody (NBP2-24918)
Immunocytochemistry Protocol

Culture cells to appropriate density in 35 mm culture dishes or 6-well plates.

1. Remove culture medium and wash the cells briefly in PBS. Add 10% formalin to the dish and fix at room temperature for 10 minutes.
2. Remove the formalin and wash the cells in PBS.
3. Permeablize the cells with 0.1% Triton X100 or other suitable detergent for 10 min.
4. Remove the permeablization buffer and wash three times for 10 minutes each in PBS. Be sure to not let the specimen dry out.
5. To block nonspecific antibody binding, incubate in 10% normal goat serum from 1 hour to overnight at room temperature.
6. Add primary antibody at appropriate dilution and incubate overnight at 4C.
7. Remove primary antibody and replace with PBS. Wash three times for 10 minutes each.
8. Add secondary antibody at appropriate dilution. Incubate for 1 hour at room temperature.
9. Remove secondary antibody and replace with PBS. Wash three times for 10 minutes each.
10. Counter stain DNA with DAPi if required.

Immunohistochemistry-Paraffin Protocol for GPR18 Antibody (NBP2-24918)
Immunohistochemistry-Paraffin Embedded Sections

Antigen Unmasking:
Bring slides to a boil in 10 mM sodium citrate buffer (pH 6.0) then maintain at a sub-boiling temperature for 10 minutes. Cool slides on bench-top for 30 minutes (keep slides in the sodium citrate buffer all the time).

Staining:
1. Wash sections in deionized water three times for 5 minutes each.
2. Wash sections in PBS for 5 minutes.
3. Block each section with 100-400 ul blocking solution (1% BSA in PBS) for 1 hour at room temperature.
4. Remove blocking solution and add 100-400 ul diluted primary antibody. Incubate overnight at 4 C.
5. Remove antibody solution and wash sections in wash buffer three times for 5 minutes each.
6. Add 100-400 ul HRP polymer conjugated secondary antibody. Incubate 30 minutes at room temperature.
7. Wash sections three times in wash buffer for 5 minutes each.
8. Add 100-400 ul DAB substrate to each section and monitor staining closely.
9. As soon as the sections develop, immerse slides in deionized water.
10. Counterstain sections in hematoxylin.
11. Wash sections in deionized water two times for 5 minutes each.
12. Dehydrate sections.
13. Mount coverslips.

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Products Related to NBP2-24918

HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control
NBP2-24918PEP	GPR18 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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