Product Datasheet

Vanilloid R1/TRPV1 Antibody - BSA Free
NBP1-71774

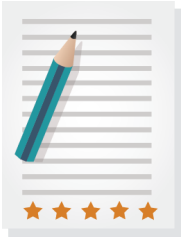
Unit Size: 0.1 ml

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

Reviews: 1 Publications: 12

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:
www.novusbio.com/NBP1-71774

Updated 9/9/2025 v.20.1



NBP1-71774

Vanilloid R1/TRPV1 Antibody - BSA Free

Product Information

Unit Size	0.1 ml
Concentration	1.0 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.05% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS

Product Description

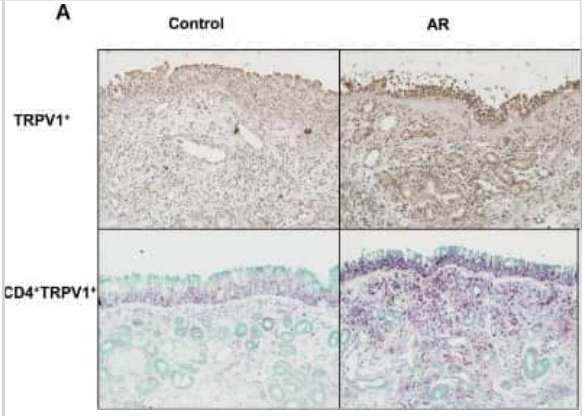
Description	Novus Biologicals Rabbit Vanilloid R1/TRPV1 Antibody - BSA Free (NBP1-71774) is a polyclonal antibody validated for use in IHC, WB and ICC/IF. Anti-Vanilloid R1/TRPV1 Antibody: Cited in 11 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Rabbit
Gene ID	7442
Gene Symbol	TRPV1
Species	Human, Mouse
Immunogen	A genomic peptide made to a C-terminal region of the human TRPV1 protein (within residues 725-839). [Swiss-Prot# Q8NER1]
Notes	Manufactured by Genomic Antibody Technology™. GAT FAQs

Product Application Details

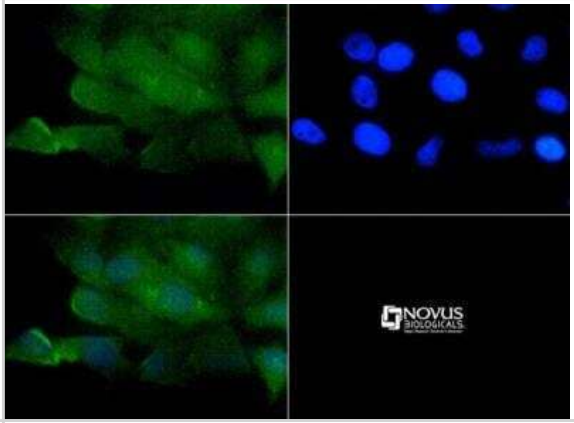
Applications	Immunohistochemistry-Paraffin, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry
Recommended Dilutions	Immunohistochemistry 1:200, Immunocytochemistry/ Immunofluorescence 1:50-1:100, Immunohistochemistry-Paraffin 1:200
Application Notes	This TRPV1 antibody is useful for ICC/IF and IHC-paraffin embedded tissues. Prior to immunostaining paraffin tissues, antigen retrieval with sodium citrate buffer (pH 6.0) is recommended.

Images

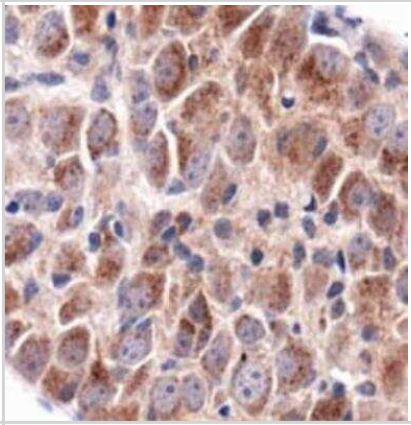
Immunohistochemistry: Vanilloid R1/TRPV1 Antibody [NBP1-71774] - The Vanilloid R1/TRPV1+ and Vanilloid R1/TRPV1+CD4+ immune cells in patients with allergic rhinitis. Immunohistochemical staining of Vanilloid R1/TRPV1 (single staining) and CD4/Vanilloid R1/TRPV1 (double staining) in patients with allergic rhinitis compared with control subjects. Image collected and cropped by CiteAb from the following publication (https://www.oncotarget.com/fulltext/6653), licensed under a CC-BY license.



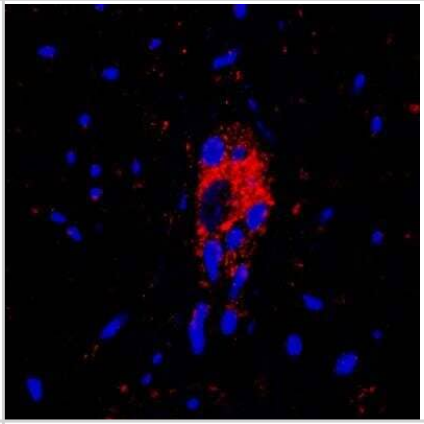
Immunocytochemistry/Immunofluorescence: Vanilloid R1/TRPV1 Antibody [NBP1-71774] - TRPV1 antibody was tested at 1:50 in HeLa cells with FITC (green). Nuclei were counterstained with DAPI (blue).



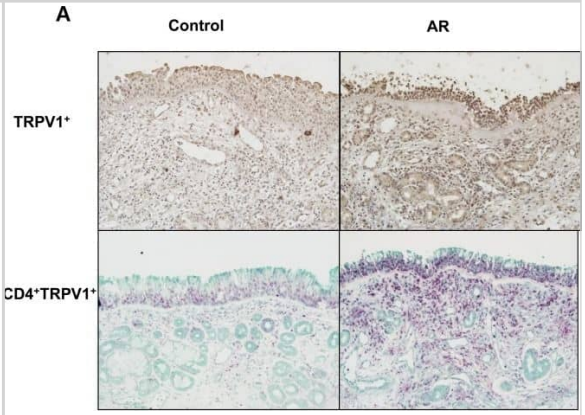
Immunohistochemistry: Vanilloid R1/TRPV1 Antibody [NBP1-71774] - Analysis of TRPV1 in mouse dorsal root ganglion using DAB with hematoxylin counterstain.



Immunohistochemistry-Paraffin: Vanilloid R1/TRPV1 Antibody [NBP1-71774] - Human stomach tissue. Positive staining can be observed in gastric neurons. Image from verified customer review.



The TRPV1+ and TRPV1+CD4+ immune cells in patients with allergic rhinitisA. Immunohistochemical staining of TRPV1 (single staining) and CD4/TRPV1 (double staining) in patients with allergic rhinitis compared with control subjects B. Counts of TRPV1 + cells and TRPV1+ CD4+ cells in each groups. The statistical P values are presented as * (P < 0.05), and ** (P < 0.01).



Publications

Meilinn Tram, Tarek Ibrahim, Anahit Hovhannisyan, Armen Akopian, Shivani Ruparel Lingual innervation in male and female marmosets Neurobiology of Pain 2023-05-31 [PMID: 38099285]

Warfield R, Robinson JA, Podgorski RM et al. Neuroinflammation in the Dorsal Root Ganglia and Dorsal Horn Contributes to Persistence of Nociceptor Sensitization in SIV-Infected Antiretroviral Therapy-Treated Macaques The American journal of pathology 2023-09-19 [PMID: 37734588] (IHC)

Tram M, Ibrahim T, Hovhannisyan A et al. Lingual innervation in male and female marmosets Neurobiology of Pain 2023-08-01 (Immunohistochemistry-Frozen, Primate)

Details:
Species-marmoset (Callithrix jacchus)

Kumar V, Kingsley D, Madhurakkat Perikamana S et al. Self-assembled innervated vasculature-on-a-chip to study nociception Biofabrication 2023-04-13 [PMID: 36996841] (WB)

Hovhannisyan AH, Lindquist KA, Belugin S et al. Sensory innervation of masseter, temporal and lateral pterygoid muscles in common marmosets bioRxiv : the preprint server for biology 2023-02-12 [PMID: 36798270] (IHC-Fr, Marmoset, Primate)

Details:
Dilution used in IHC-Fr 1:200

Ilhan HD, Unal B, Ayaz Y, Erin N Changes in TRPV1 Expression as Well as Substance P and Vasoactive Intestinal Peptide Levels Are Associated with Recurrence of Pterygium International journal of molecular sciences 2022-12-10 [PMID: 36555331] (IHC-P, Human)

Details:
Dilution used in IHC-P 1:100

Moutafidi A, Gatzounis G, Zolota V, Assimakopoulou M Heat shock factor 1 in brain tumors: a link with transient receptor potential channels TRPV1 and TRPA1 Journal of molecular histology 2021-09-30 [PMID: 34591198]

Bi X, Xu Y, Li T et al. Chronic stress augments esophageal inflammation, and alters the expression of transient receptor potential vanilloid 1 and protease-activated receptor 2 in a murine model Mol Med Rep 2019-06-01 [PMID: 31059059]

Rizopoulos T, Papadaki-Petrou H, Assimakopoulou M. Expression Profiling of the Transient Receptor Potential Vanilloid (TRPV) Channels 1, 2, 3 and 4 in Mucosal Epithelium of Human Ulcerative Colitis. Cells. 2018-06-15 [PMID: 29914124] (IHC-P, Human)

Assimakopoulou M, Pagoulatos D, Nterma P, Pharmakakis N. Immunolocalization of cannabinoid receptor type 1 and CB2 cannabinoid receptors, and transient receptor potential vanilloid channels in pterygium Mol Med Rep 2017-08-14 [PMID: 28849159] (Human)

Hidaka T, Ogawa E, Kobayashi EH et al. The aryl hydrocarbon receptor AhR links atopic dermatitis and air pollution via induction of the neurotrophic factor artemin. Nat. Immunol. 2016-11-21 [PMID: 27869817] (Mouse)

Details:
This citation used the DyLight 488 version of this antibody.

Samivel R, Kim DW, Son HR et al. The role of TRPV1 in the CD4+ T cell-mediated inflammatory response of allergic rhinitis. Oncotarget. 2016-01-05 [PMID: 26700618] (IF/IHC, Human, Mouse)

Procedures

Immunohistochemistry-Paraffin protocol for TRPV1 Antibody (NBP1-71774)
Vanilloid R1/TRPV1 Antibody:
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.

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

Immunocytochemistry/Immunofluorescence Protocol for TRPV1 Antibody (NBP1-71774)
Vanilloid R1/TRPV1 Antibody:
Immunocytochemistry Protocol

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

1. Remove culture medium and add 10% formalin to the dish. Fix at room temperature for 30 minutes.
2. Remove the formalin and add ice cold methanol. Incubate for 5-10 minutes.
3. Remove methanol and add washing solution (i.e. PBS). Be sure to not let the specimen dry out. Wash three times for 10 minutes.
4. To block nonspecific antibody binding incubate in 10% normal goat serum from 1 hour to overnight at room temperature.
5. Add primary antibody at appropriate dilution and incubate at room temperature from 2 hours to overnight at room temperature.
6. Remove primary antibody and replace with washing solution. Wash three times for 10 minutes.
7. Add secondary antibody at appropriate dilution. Incubate for 1 hour at room temperature.
8. Remove antibody and replace with wash solution, then wash for 10 minutes. Add Hoechst 33258 to wash solution at 1:25,0000 and incubate for 10 minutes. Wash a third time for 10 minutes.
9. Cells can be viewed directly after washing. The plates can also be stored in PBS containing Azide covered in Parafilm (TM). Cells can also be cover-slipped using Fluoromount, with appropriate sealing.

*The above information is only intended as a guide. The researcher should determine what protocol best meets their needs. Please follow safe laboratory procedures."

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Products Related to NBP1-71774

HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control
NBP1-71774G	Vanilloid R1/TRPV1 Antibody [DyLight 488]

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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