

Product Datasheet

CD4 Antibody NBP1-19371SS

Unit Size: 0.025 ml

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

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Updated 6/15/2014 v.20.1

NBP1-19371SS

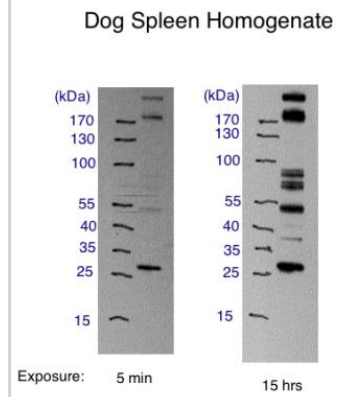
CD4 Antibody

Product Information	
Unit Size	0.025 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	0.02% Sodium Azide
Purity	Immunogen affinity purified
Buffer	PBS
Product Description	
Host	Rabbit
Gene ID	920
Gene Symbol	CD4
Species	Human, Mouse, Rat, Rabbit
Species Reactivity	Rabbit reactivity reported in the scientific literature (PMID: 2212730). Customer feedback positive on canine.
Immunogen	A synthetic peptide made to an C-terminal region of the human CD4 protein (within residues 400-458). [Swiss-Prot P01730]
Product Application Details	
Applications	Western Blot, Simple Western, Flow Cytometry, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin
Recommended Dilutions	Flow Cytometry 1:10-1:1000, Immunocytochemistry/Immunofluorescence 1:50-1:200, Immunohistochemistry 1:50-1:200, Immunohistochemistry-Paraffin 1:50-1:200, Western Blot 1 ug/ml, Simple Western 1:100
Application Notes	This CD4 antibody is useful for Immunocytochemistry/Immunofluorescence, Flow (see reviews), Western Blot, and Immunohistochemistry-paraffin embedded sections. In WB, a band is seen ~45 kDa. In ICC/IF, membrane staining was observed in human brain cells. Prior to immunostaining paraffin tissues, antigen retrieval with sodium citrate buffer (pH 6.0) is recommended. In ICC/IF, membrane staining was observed in Jurkat cells. In Simple Western only 10-15 uL of the recommended dilution is used per data point.

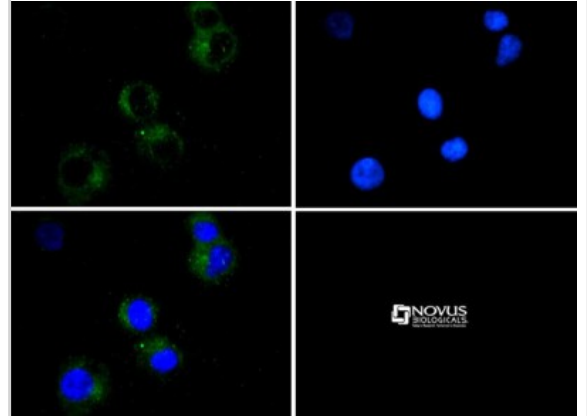


Images

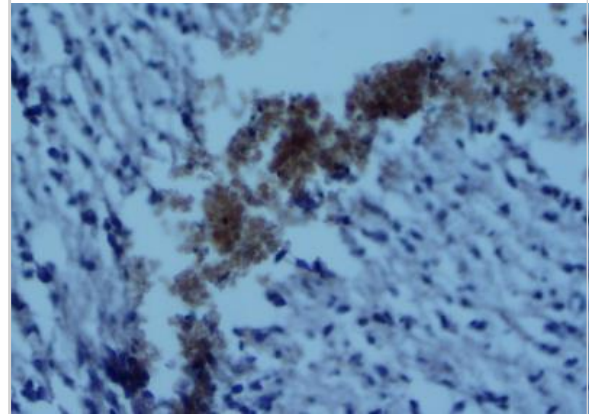
Western Blot: CD4 Antibody [NBP1-19371] - Dog spleen homogenate. Probed with anti-CD4 and anti-CD8. Image from verified customer review.



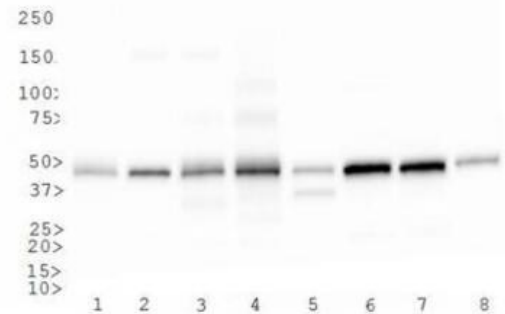
Immunocytochemistry/Immunofluorescence: CD4 Antibody [NBP1-19371] - CD4 antibody was tested in Jurkat cells with Dylight 488 (green). Nuclei were counterstained with DAPI (blue).



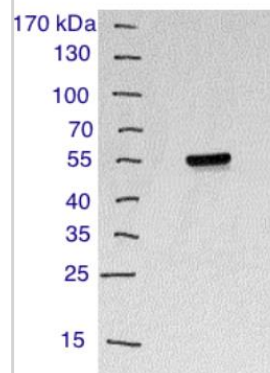
Immunohistochemistry-Paraffin: CD4 Antibody [NBP1-19371] - Staining of paraffin-embedded mouse brain tissue. Photo courtesy of product review by verified customer.



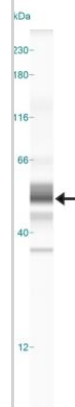
Western Blot: CD4 Antibody [NBP1-19371] - CD4 antibody was tested in the following cell lysates: Lane 1) human spleen 2) human tonsil 3) human placenta 4) human kidney 5) human liver 6) mouse spleen 7) mouse placenta 8) rat placenta.



Western Blot: CD4 Antibody [NBP1-19371] - Mouse spleen, 25ug total protein. Image from verified customer review.



Simple Western: CD4 Antibody [NBP1-19371] - Simple Western lane view shows a specific band for CD4 in 0.5 mg/ml of HeLa lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system.



Publications

Zheng YH, Li FD, Tian C et al. Notch gamma-Secretase Inhibitor Dibenzazepine Attenuates Angiotensin II-Induced Abdominal Aortic Aneurysm in ApoE Knockout Mice by Multiple Mechanisms. PLoS One 2013 Dec 16 [PMID: 24358274] (IHC-P, Mouse)

Migita K, Sho M, Shimada K et al. Significant involvement of herpesvirus entry mediator in human esophageal squamous cell carcinoma. Cancer. 2013 Nov 18 [PMID: 24249528] (IHC, Mouse)

Yasuda S, Sho M, Yamato I et al. Simultaneous blockade of programmed death 1 and vascular endothelial growth factor receptor 2 (VEGFR2) induces synergistic anti-tumour effect in vivo. Clin Exp Immunol. 2013 Jun [PMID: 23600839] (IHC-P, Mouse)

Hwang I, Ahn G, Park E et al. An acidic polysaccharide of Panax ginseng ameliorates experimental autoimmune encephalomyelitis and induces regulatory T cells Immunol Lett 2011 Aug 30 [PMID: 21524666] (IHC, ICC/IF, Mouse)

Lu Y, Li B, Wang X et al. The effect of programmed cryopreservation on immunogenicity of bladder mucosa in New Zealand rabbits. Cryobiology. 2011 Nov 22. [PMID: 22127304] (IHC, Rabbit)

Procedures

Western Blot protocol specific for CD4 antibody (NBP1-19371)

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 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 Embedded Sections Protocol (NBP1-19371)

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 CD4 Antibody (NBP1-19371)

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 1:25,000 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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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.

For more information on our guarantee, please visit www.novusbio.com/guarantee.

