Product Datasheet

CD8 Antibody (53-6.7) - BSA Free
NBP1-49045

Unit Size: 0.5 mg

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

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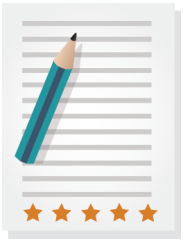


NBP1-49045

CD8 Antibody (53-6.7) - BSA Free

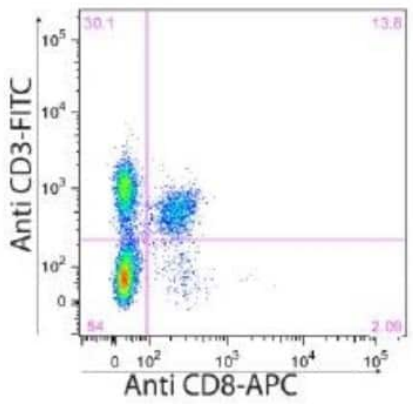
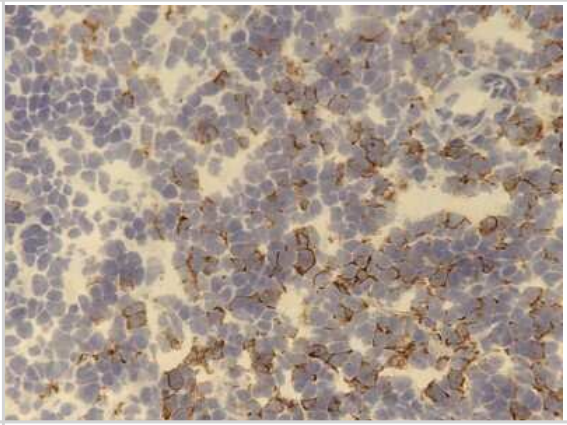
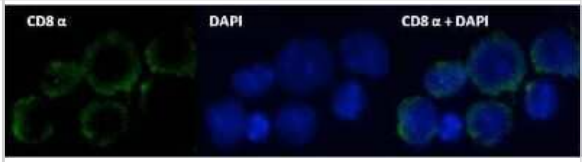
Product Information	
Unit Size	0.5 mg
Concentration	1 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	53-6.7
Preservative	0.02% Sodium Azide
Isotype	IgG2a Kappa
Purity	Protein A or G purified
Buffer	PBS
Target Molecular Weight	27 kDa

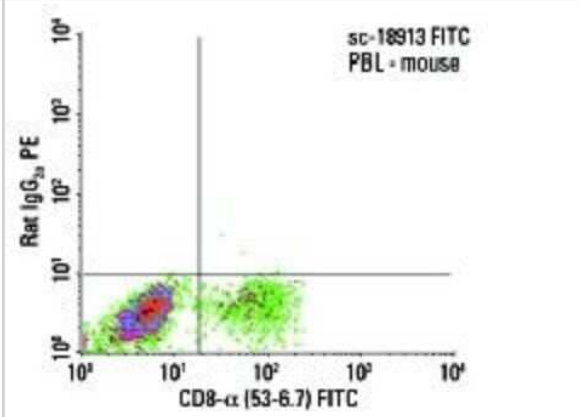
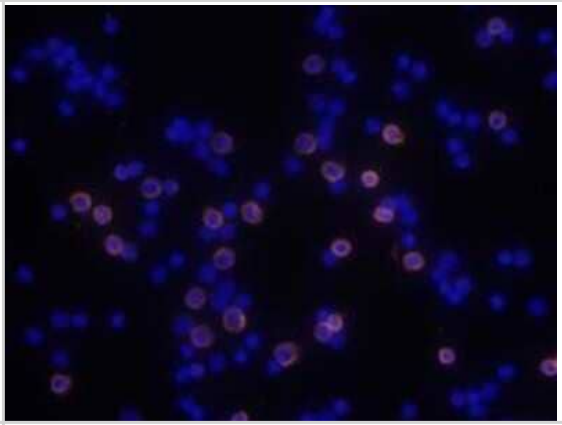
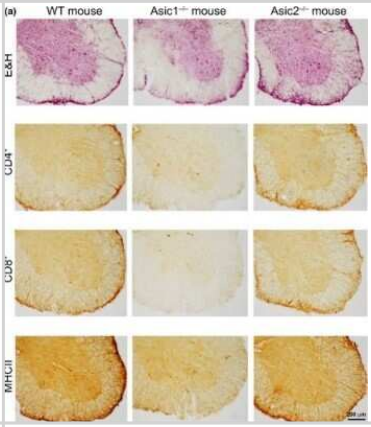
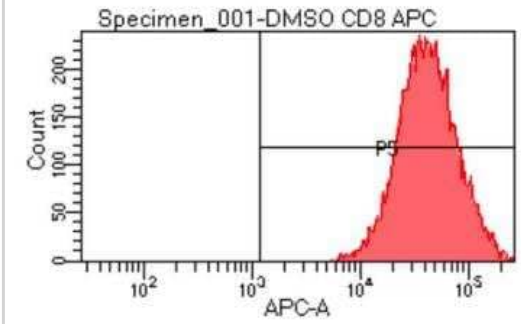
Product Description	
Description	This CD8 alpha antibody serves as an effective marker of cytotoxic T lymphocytes by binding to the CD8 co-receptor expressed on the cell surface of cytotoxic T cells, recognizing the topological domain of CD8 alpha. Because this CD8 antibody is made to the alpha chain it will recognize both the CD8 alpha - CD8 beta heterodimer, the most common form, as well as the CD8 alpha - CD8 alpha homodimer. The CD8A gene is also expressed in natural killer cells (NK cells), dendritic cells and cortical thymocytes making the CD8 alpha antibody a potential marker for these cells.
Host	Rat
Gene ID	925
Gene Symbol	CD8A
Species	Mouse, Rat
Immunogen	CD8 Antibody (53-6.7) was developed against mouse thymus or spleen.

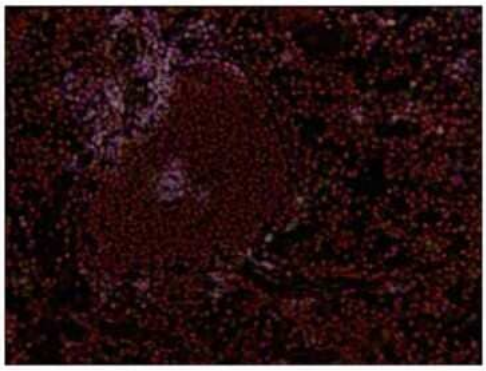
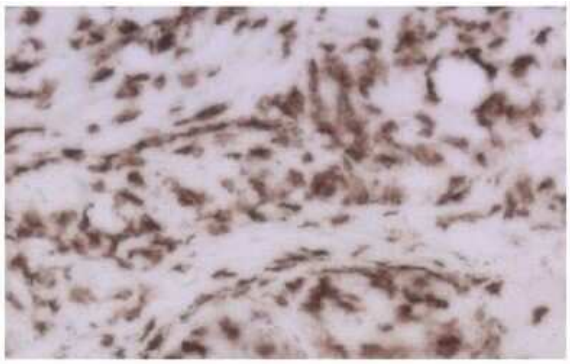
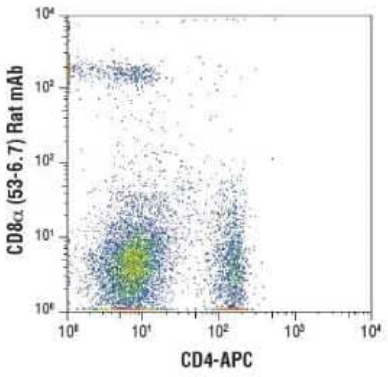
Product Application Details	
Applications	Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin, Immunoprecipitation, Cell depletion, CyTOF-ready, Inhibition of T Cell Function
Recommended Dilutions	Flow Cytometry 1:10 - 1:1000, Immunohistochemistry 1:10-1:500, Immunocytochemistry/ Immunofluorescence 1:10-1:500. Use reported in scientific literature, Immunoprecipitation 1:10 - 1:500. Use reported in scientific literature (PMID 24565643), Immunohistochemistry-Paraffin 1:10-1:500, Immunohistochemistry-Frozen 1:10-1:500, Cell depletion, Inhibition of T Cell Function, CyTOF-ready

Application Notes	Each lot of this CD8a antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is <0.25 ug/10^6 cells in 100 uL volume. It is recommended that the reagent be titrated for optimal performance for each application. The 53-6.7 antibody has been reported to block antigen presentation via MHC class I and inhibit T cell responses to IL-2. This antibody has also been used for depletion of CD8a+ cells. Additional reported applications (for the relevant formats) include: immunoprecipitation, in vivo and in vitro cell depletion, inhibition of CD8 T cell proliferation, blocking of cytotoxicity, and immunohistochemical staining of both acetone-fixed frozen sections and zinc-fixed paraffin-embedded sections.

Images

Flow Cytometry: CD8 Antibody (53-6.7) [NBP1-49045] - CD8 alpha Antibody (53-6.7) [NBP1-49045] - Analysis of lymph nodes by multiple staining.	
Immunohistochemistry-Paraffin: CD8 Antibody (53-6.7) [NBP1-49045] - CD8 alpha Antibody (53-6.7) [NBP1-49045] - CD8 alpha expression in mouse spleen tissue using anti-CD8 alpha antibody. Image from verified customer review.	
Immunocytochemistry/Immunofluorescence: CD8 Antibody (53-6.7) [NBP1-49045] - CD8 alpha Antibody (53-6.7) [NBP1-49045] - Analysis of bone marrow tissue by single and multiple staining.	

Flow Cytometry: CD8 Antibody (53-6.7) [NBP1-49045] - CD8 alpha Antibody (53-6.7) [NBP1-49045] - Staining of peripheral blood leukocytes.	
Immunocytochemistry/Immunofluorescence: CD8 Antibody (53-6.7) [NBP1-49045] - CD8 alpha Antibody (53-6.7) [NBP1-49045] - Analysis of immersion fixed splenocytes. Primary antibody was used at a dilution of 10 ug/mL and incubated for 3 hours at room temperature.	
Immunohistochemistry: CD8 Antibody (53-6.7) [NBP1-49045] - Histopathological analysis of spinal cord in EAE mice. Representative spinal cord sections from wild-type (WT), Asic1-/- , and Asic2-/- mice at 45 days after immunization. Sections of the spinal cord anterior horn were stained with hematoxylin and eosin (E&H) to assess inflammation and immunostained for MCHII, CD4+, CD8+ infiltrating cells. Image collected and cropped by CiteAb from the following publication (https://onlinelibrary.wiley.com/doi/abs/10.1111/ejn.14302), licensed under a CC-BY license.	
Flow Cytometry: CD8 Antibody (53-6.7) - BSA Free [NBP1-49045] - Analysis of isolated mouse splenic CD8+ T cells using CD8 antibody (53-6.7) [Allophycocyanin] (NBP1-49045APC). Image from verified customer review.	

Immunohistochemistry-Frozen: CD8 Antibody (53-6.7) [NBP1-49045] - CD8 alpha Antibody (53-6.7) [NBP1-49045] - Analysis of mosue spleen sections. CD8+ lymphocytes are marked by brown labeling of the cell surface.	
Immunohistochemistry-Frozen: CD8 Antibody (53-6.7) [NBP1-49045] - Analysis of CD8+ T cells in allogeneic skin grafted onto a mouse.	
Flow Cytometry: CD8 Antibody (53-6.7) [NBP1-49045] - Analysis of fixed murine splenocytes by multiple staining.	

Publications

Cai EP, Ishikawa Y, Zhang W et al. Genome-scale in vivo CRISPR screen identifies RNLS as a target for beta cell protection in type 1 diabetes Nat Metab 2020-07-27 [PMID: 32719542]

Chakrabarti J, Holokai L, Syu L et al. Hedgehog signaling induces PD-L1 expression and tumor cell proliferation in gastric cancer. Oncotarget 2018-12-21 [PMID: 30647844]

Mendes da Silva A Developing New Pharmacological Tools to Modulate Transposable Elements' Activity in Colorectal Cancer Thesis 2023-01-01 (ICC/IF)

Won S, Lee C, Bae S et al. Mass-produced gram-negative bacterial outer membrane vesicles activate cancer antigen-specific stem-like CD8(+) T cells which enables an effective combination immunotherapy with anti-PD-1 Journal of Extracellular Vesicles 2023-08-10 [PMID: 37563797] (Immunocytochemistry/ Immunofluorescence)

Zhou J, Wang H, Shu T et al. Myeloid-intrinsic cell cycle-related kinase drives immunosuppression to promote tumorigenesis iScience 2023-10-20 [PMID: 37731616]

Son S, Nam J, Kim AS et al. Induction of T-helper-17-cell-mediated anti-tumour immunity by pathogen-mimicking polymer nanoparticles Nature biomedical engineering 2022-12-23 [PMID: 36564626] (IHC-Fr, Mouse)

Salman S, Meyers DJ, Wicks EE Et al. HIF inhibitor 32-134D eradicates murine hepatocellular carcinoma in combination with anti-PD1 therapy J Clin Invest 2022-05-02 [PMID: 35499076] (FLOW, Mouse)

Details:
Citation using the Alexa Fluor 488 version of this antibody.

Bhatia S Protease activated nanosensors for the noninvasive diagnosis of community-acquired pneumonia Thesis 2022-01-01 (IHC-Fr, Mouse)

Reyes AF, Goldusky J, Bhimalli P et al. Tracking fluorescently labeled IL-15 and anti-PD-1 in the tumor microenvironment and draining lymph nodes Journal of immunological methods 2022-03-28 [PMID: 35358495] (IF/IHC, Mouse)

Jie X, Chen Y, Zhao Y et al. Targeting KDM4C enhances CD8+ T cell mediated antitumor immunity by activating chemokine CXCL10 transcription in lung cancer Journal for immunotherapy of cancer 2022-02-01 [PMID: 35121645] (IF/IHC, Mouse)

Zhang Z, Na H, Gan Q Et al. Monomeric C-reactive protein via endothelial CD31 for neurovascular inflammation in an ApoE genotype-dependent pattern: A risk factor for Alzheimer's disease? Aging cell 2021-10-23 [PMID: 34687487] (IHC-Fr, Mouse)

Yang W, Feng Y, Zhou J et al. A selective HDAC8 inhibitor potentiates antitumor immunity and efficacy of immune checkpoint blockade in hepatocellular carcinoma Science translational medicine 2021-04-07 [PMID: 33827976]

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NBP1-43321-0.5mg	Rat IgG2a Kappa Light Chain Isotype Control (R2a)
NBP1-49045PE	CD8 Antibody (53-6.7) [PE]

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