

# Product Datasheet

## CD8 Antibody (53-6.7) - Azide and BSA Free NBP2-80658

Unit Size: 0.5 mg

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

[www.novusbio.com](http://www.novusbio.com)



[technical@novusbio.com](mailto:technical@novusbio.com)

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:  
[www.novusbio.com/NBP2-80658](http://www.novusbio.com/NBP2-80658)

Updated 6/25/2024 v.20.1

Earn rewards for product  
reviews and publications.

Submit a publication at [www.novusbio.com/publications](http://www.novusbio.com/publications)

Submit a review at [www.novusbio.com/reviews/destination/NBP2-80658](http://www.novusbio.com/reviews/destination/NBP2-80658)



**NBP2-80658**

CD8 Antibody (53-6.7) - Azide and 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	No Preservative
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	Immunohistochemistry-Paraffin, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, 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, Immunohistochemistry-Paraffin reported in scientific literature (PMID 24565643), Immunohistochemistry-Frozen 1:10 - 1:500, Cell depletion, Inhibition of T Cell Function, CyTOF-ready

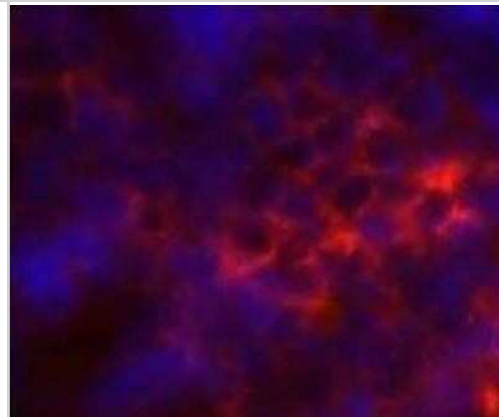


**Application Notes**

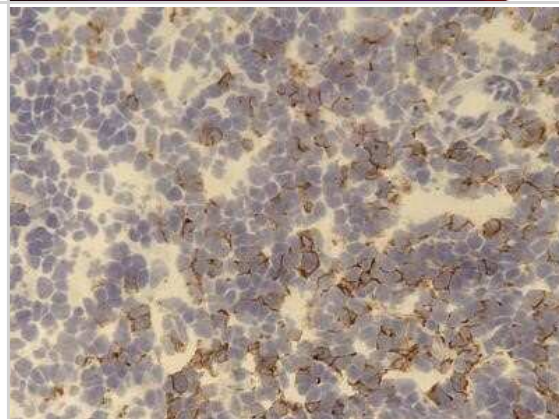
Each lot of this CD8a antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is  $<0.25 \mu\text{g}/10^6$  cells in 100  $\mu\text{L}$  volume. It is recommended that the reagent be titrated for 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. Use in ICC/IF was reported in scientific literature. Use in Immunohistochemistry-Paraffin reported in scientific literature (PMID 24565643).

**Images**

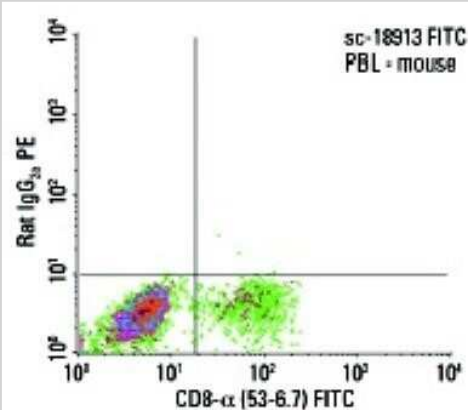
Immunocytochemistry: CD8 Antibody (53-6.7) - Azide and BSA Free [NBP2-80658] - Analysis of frozen spleen sections. Blocking: 1 hour at 25C with serum at 5% concentration . Image from the standard format of this antibody.



Immunohistochemistry: CD8 Antibody (53-6.7) - Azide and BSA Free [NBP2-80658] - CD8 alpha expression in mouse spleen tissue using anti-CD8 alpha antibody. Image from verified customer review. Image from the standard format of this antibody.



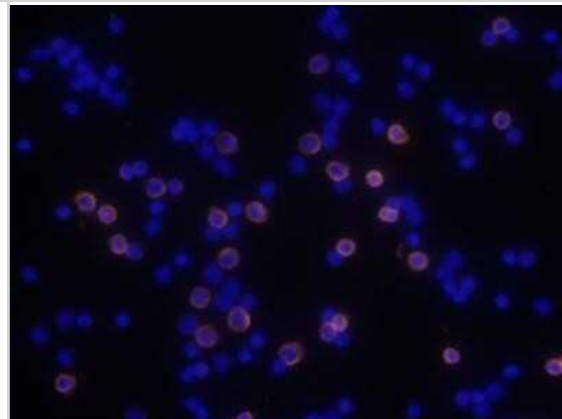
Flow Cytometry: CD8 Antibody (53-6.7) - Azide and BSA Free [NBP2-80658] - Staining of peripheral blood leukocytes. Image from the standard format of this antibody.



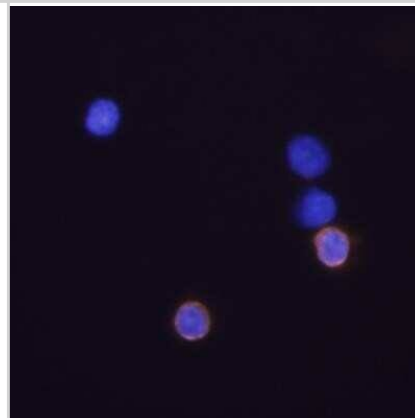
Immunocytochemistry/Immunofluorescence: CD8 Antibody (53-6.7) - Azide and BSA Free [NBP2-80658] - Analysis of bone marrow tissue by single and multiple staining. Image from the standard format of this antibody.



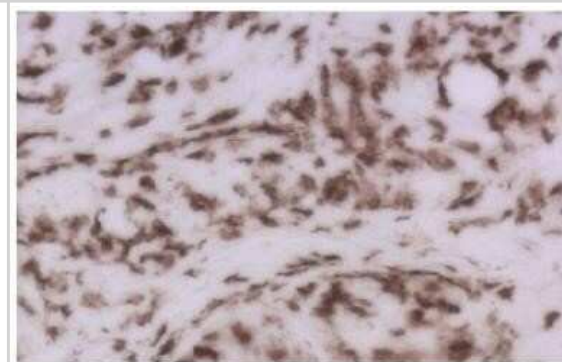
Immunocytochemistry/Immunofluorescence: CD8 Antibody (53-6.7) - Azide and BSA Free [NBP2-80658] - Analysis of immersion fixed splenocytes. Primary antibody was used at a dilution of 10 ug/mL and incubated for 3 hours at room temperature. Image from the standard format of this antibody.



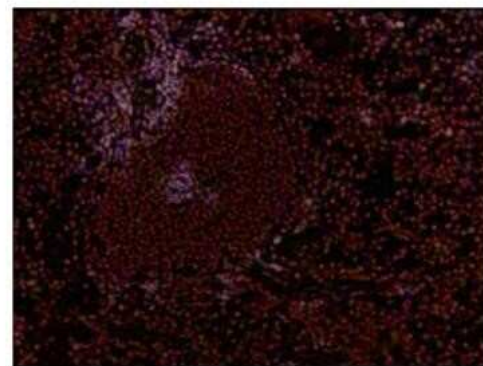
Immunocytochemistry/Immunofluorescence: CD8 Antibody (53-6.7) - Azide and BSA Free [NBP2-80658] - Analysis of splenocytes. Primary antibody was used at a dilution of 10 ug/mL and incubated for 3 hours at room temperature. Image from the standard format of this antibody.



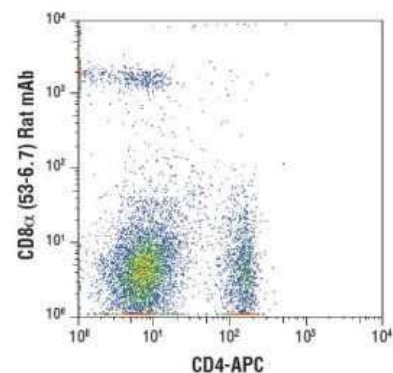
Immunohistochemistry: CD8 Antibody (53-6.7) - Azide and BSA Free [NBP2-80658] - Analysis of CD8+ T cells in allogeneic skin grafted onto a mouse. Image from the standard format of this antibody.



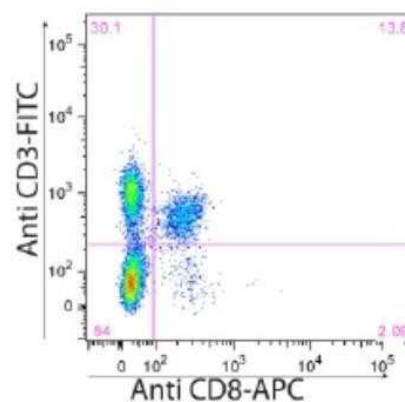
Immunohistochemistry-Paraffin: CD8 Antibody (53-6.7) - Azide and BSA Free [NBP2-80658] - Analysis of mouse spleen sections. CD8+ lymphocytes are marked by brown labeling of the cell surface. Image from the standard format of this antibody.



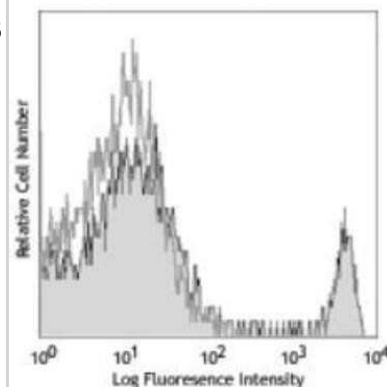
Flow Cytometry: CD8 Antibody (53-6.7) - Azide and BSA Free [NBP2-80658] - Analysis of fixed murine splenocytes by multiple staining. Image from the standard format of this antibody.



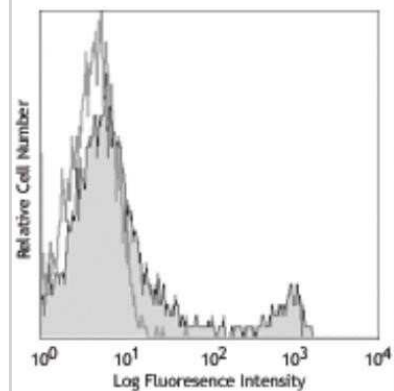
Flow Cytometry: CD8 Antibody (53-6.7) - Azide and BSA Free [NBP2-80658] - Analysis of lymph nodes by multiple staining. Image from the standard format of this antibody.



Flow Cytometry: CD8 Antibody (53-6.7) - Azide and BSA Free [NBP2-80658] - C57BL/6 mouse splenocytes were stained with biotinylated CD8 (clone 53-6.7) (filled histogram) or rat IgG2a, k isotype control (open histogram), followed by Sav-PE. Image from the standard format of this antibody.



Flow Cytometry: CD8 Antibody (53-6.7) - Azide and BSA Free [NBP2-80658] - C57BL/6 mouse splenocytes were stained with purified CD8 (clone 53-6.7) (filled histogram) or rat IgG2a, k isotype control (open histogram), followed by anti-rat IgG FITC. Image from the standard format of this antibody.





### **Novus Biologicals USA**

10730 E. Briarwood Avenue  
Centennial, CO 80112  
USA  
Phone: 303.730.1950  
Toll Free: 1.888.506.6887  
Fax: 303.730.1966  
nb-customerservice@bio-techne.com

### **Bio-Techne Canada**

21 Canmotor Ave  
Toronto, ON M8Z 4E6  
Canada  
Phone: 905.827.6400  
Toll Free: 855.668.8722  
Fax: 905.827.6402  
canada.inquires@bio-techne.com

### **Bio-Techne Ltd**

19 Barton Lane  
Abingdon Science Park  
Abingdon, OX14 3NB, United Kingdom  
Phone: (44) (0) 1235 529449  
Free Phone: 0800 37 34 15  
Fax: (44) (0) 1235 533420  
info.EMEA@bio-techne.com

### **General Contact Information**

www.novusbio.com  
Technical Support: nb-technical@bio-techne.com  
Orders: nb-customerservice@bio-techne.com  
General: novus@novusbio.com

### **Products Related to NBP2-80658**

---

HAF005	Goat anti-Rat IgG Secondary Antibody [HRP]
NB7115	Goat anti-Rat IgG (H+L) Secondary Antibody [HRP]
NBP1-43321-0.5mg	Rat IgG2a Kappa Light Chain Isotype Control (R2a)
NBP2-34039PEP	CD8 Recombinant Protein Antigen

---

### **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 100% guarantee, please visit [www.novusbio.com/guarantee](http://www.novusbio.com/guarantee)

Earn gift cards/discounts by submitting a review: [www.novusbio.com/reviews/submit/NBP2-80658](http://www.novusbio.com/reviews/submit/NBP2-80658)

Earn gift cards/discounts by submitting a publication using this product:  
[www.novusbio.com/publications](http://www.novusbio.com/publications)

