

# Product Datasheet

## CD45 Antibody (2B11 + PD7/26) - Azide and BSA Free NBP2-34528-0.1mg

Unit Size: 0.1 mg

Store at -20 to -80C. Avoid freeze-thaw cycles.

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



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

**Reviews: 1 Publications: 9**

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:  
[www.novusbio.com/NBP2-34528](http://www.novusbio.com/NBP2-34528)

Updated 10/23/2024 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/NBP2-34528](http://www.novusbio.com/reviews/destination/NBP2-34528)



**NBP2-34528-0.1mg**

CD45 Antibody (2B11 + PD7/26) - Azide and BSA Free

Product Information	
Unit Size	0.1 mg
Concentration	1.0 mg/ml
Storage	Store at -20 to -80C. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	2B11 + PD7/26
Preservative	No Preservative
Isotype	IgG1 Kappa/IgG1 Kappa
Purity	Protein A or G purified
Buffer	10 mM PBS
Target Molecular Weight	147 kDa

Product Description	
Description	1.0 mg/ml of antibody purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS WITHOUT BSA & azide. Also available at 200 ug/ml WITH BSA & azide (NBP2-34287).  Antibody with azide - store at 2 to 8C. Antibody without azide - store at -20 to -80C.
Host	Mouse
Gene ID	5788
Gene Symbol	PTPRC
Species	Human
Marker	Leucocyte Marker
Specificity/Sensitivity	Recognizes the CD45 leukocyte common antigen (LCA) family which is comprised of at least four isoforms of membrane glycoproteins (220, 205, 190, 180kDa) expressed on hematopoietic cell lines but absent on non-hematopoietic cell lines, normal and malignant non-hematopoietic tissues. The intracellular portions of these molecules have protein phosphatase activity and are involved in regulation of transmembrane signals. Antibody to CD45 is useful in differential diagnosis of lymphoid tumors from non-hematopoietic undifferentiated neoplasms. A positive result with this monoclonal antibody is highly indicative of lymphoid or myeloid origin. Certain types of lymphoid neoplasms may lack CD45 (Hodgkin lymphoma, some T-cell lymphomas, and some leukemias) so its absence does not rule out a hematolymphoid tumor. This antibody is expressed almost exclusively by cells of hematopoietic lineage and is present in most benign and malignant lymphocytes as well as plasma cell precursors.
Immunogen	Isolated neoplastic cells from T cell lymphoma (2B11); and human peripheral blood lymphocytes maintained in T cell growth factor (PD7/26)

Product Application Details	
Applications	Western Blot, Flow Cytometry, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin, CyTOF-ready
Recommended Dilutions	Western Blot 0.5-1.0ug/ml, Flow Cytometry 0.5 - 1 ug/million cells, Immunohistochemistry, Immunohistochemistry-Paraffin 0.5-1.0ug/ml, Immunohistochemistry-Frozen 0.5-1.0ug/ml, CyTOF-ready

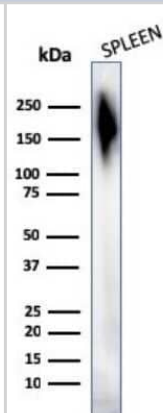


**Application Notes**

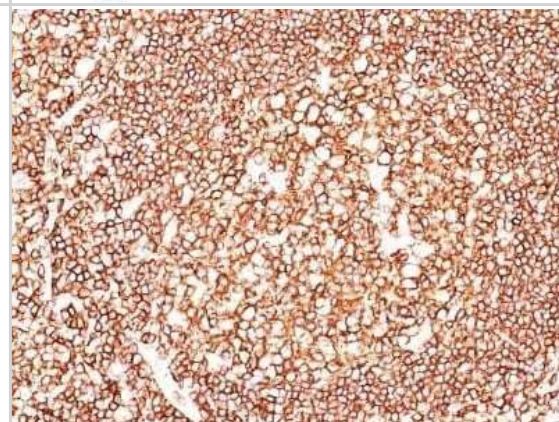
Immunohistochemistry (Formalin-fixed): 1-2ug/ml for 30 minutes at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95C followed by cooling at RT for 20 minutes. Optimal dilution for a specific application should be determined.

**Images**

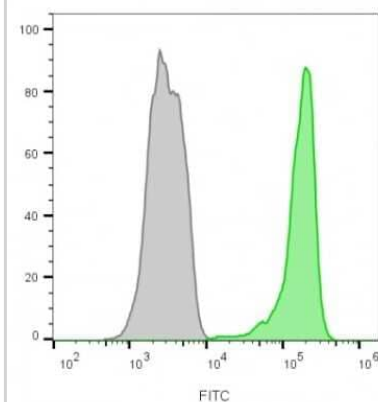
Western Blot analysis of human Spleen tissue lysates using CD45 Antibody (2B11 + PD7/26). Observed molecular weight ~200 kDa.



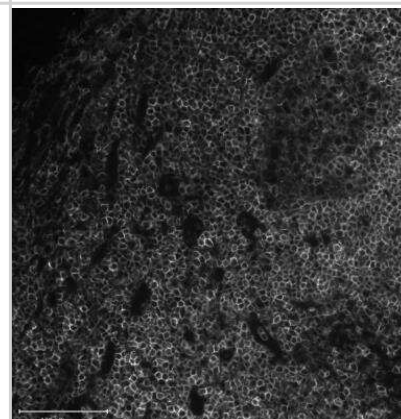
Formalin-fixed, paraffin-embedded human tonsil (20X) stained with CD45 Antibody (2B11 + PD7/26).



Flow cytometry analysis of lymphocyte-gated PBMCs unstained (gray) or stained with CF488A-labeled CD45 antibody (2B11 + PD7/26) (green).



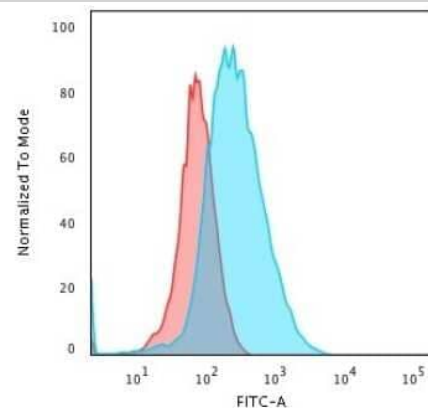
Staining of human tonsil with Alexa Fluor 488 conjugate of CD45 Antibody (2B11 + PD7/26), pH 9 antigen retrieval. Image from verified customer review.



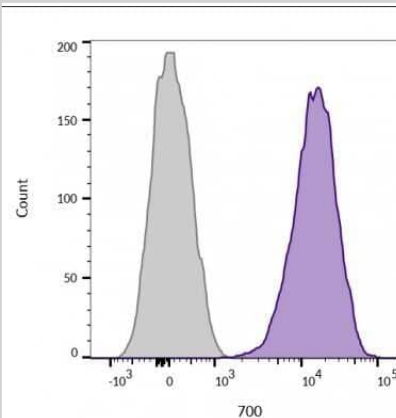
Formalin-fixed, paraffin-embedded human tonsil (10X) stained with CD45 Antibody (2B11 + PD7/26).



Flow Cytometric Analysis of PFA-fixed Jurkat cells using CD45 Mouse Monoclonal Antibody (2B11+PD7/26) followed by Goat anti- Mouse- IgG- CF488 (Blue); Isotype Control (Red).



Flow Cytometric Analysis of live Jurkat cells unstained (grey) and using CD45 Mouse Monoclonal Antibody (2B11+PD7/26) conjugated with CF680 (purple).



## Publications

Koedijk J, van der Werf I, Vermeulen M et al. Spatial analysis reveals distinct immune phenotypes and tertiary lymphoid structure-like aggregates in pediatric acute myeloid leukemia medRxiv 2023-03-08

D Phillips, M Matusiak, BR Gutierrez, SS Bhate, GL Barlow, S Jiang, J Demeter, KS Smythe, RH Pierce, SP Fling, N Ramchurren, MA Cheever, Y Goltsev, RB West, MS Khodadoust, YH Kim, CM Schürch, GP Nolan Immune cell topography predicts response to PD-1 blockade in cutaneous T cell lymphoma Nature Communications, 2021-11-18;12(1):6726. 2021-11-18 [PMID: 34795254]

Casper W.F. van Eijck, Francisco X. Real, Núria Malats, Disha Vadgama, Thierry P.P. van den Bosch, Michail Doukas, Casper H.J. van Eijck, Dana A.M. Mustafa GATA6 identifies an immune-enriched phenotype linked to favorable outcomes in patients with pancreatic cancer undergoing upfront surgery Cell Reports Medicine 2024-05-10 [PMID: 38733987]

Ragazzini R, Boeing S, Zanieri L et al. Defining the identity and the niches of epithelial stem cells with highly pleiotropic multilineage potency in the human thymus Developmental cell 2023-08-28 [PMID: 37652013]

Lovewell RR, Hong J, Kundu S et al. LAIR-1 agonism as a therapy for acute myeloid leukemia The Journal of clinical investigation 2023-11-15 [PMID: 37966113] (IHC-P, Mouse)

Huang H, Li N, Liang Y et al. Multi-omics analyses reveal spatial heterogeneity in primary and metastatic oesophageal squamous cell carcinoma Clinical and translational medicine 2023-11-01 [PMID: 38009315] (IHC-P, Human)

Caputo A, Vipparthi K, Bazeley P et al. Alterations in the preneoplastic breast microenvironment of BRCA1/2 mutation carriers revealed by spatial transcriptomics bioRxiv 2023-05-25 [PMID: 37292816] (IHC-P, Human)

KrAmer B, Nalin A, Ma F et al. Single-cell RNA sequencing identifies a population of human liver-type ILC1s Cell Reports 2023-01-01 [PMID: 36640314] (FLOW, Human)

Smith KD, Prince DK, Henriksen KJ Et al. Digital spatial profiling of collapsing glomerulopathy Kidney Int 2022-03-01 [PMID: 35227689] (IHC-P, Human)

Details:

Citation using the Azide and BSA Free version 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 NBP2-34528-0.1mg**

---

HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
NBP2-51591-0.02mg	Recombinant Human CD45 His Protein
210-TA-005	TNF-alpha [Unconjugated]

---

### **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/NBP2-34528](http://www.novusbio.com/reviews/submit/NBP2-34528)

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

