## **Product Datasheet**

### CD45 Antibody (MEM-28) - BSA Free NB500-319

Unit Size: 0.1 mg

Store at 4C. Do not freeze.

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#### NB500-319

CD45 Antibody (MEM-28) - BSA Free

Product Information	
Unit Size	0.1 mg
Concentration	1.0 mg/ml
Storage	Store at 4C. Do not freeze.
Clonality	Monoclonal
Clone	MEM-28
Preservative	0.09% Sodium Azide
Isotype	IgG1
Purity	Protein A purified
Buffer	PBS (pH 7.4)
Target Molecular Weight	147 kDa
Product Description	
Host	Mouse
Gene ID	5788
Gene Symbol	PTPRC
Species	Human, Mouse, Equine (Negative)
Reactivity Notes	Mouse reactivity reported in scientific literature (PMID: 27272386). Please note that CD45 Antibody (MEM-28) is reactive to Mouse and derived from the same host, Mouse. Mouse-On-Mouse blocking reagent may be needed for IHC and ICC experiments to reduce high background signal. You can find these reagents under catalog numbers PK-2200-NB and MP-2400-NB. Please contact Technical Support if you have any questions.
Specificity/Sensitivity	CD45 Antibody (MEM-28) reacts with all alternative forms of human CD45 antigen (Leukocyte Common Antigen), a 180-220 kDa single chain type I transmembrane protein expressed at high level on all cells of hematopoietic origin, except erythrocytes and platelets. HLDA III; WS Code NL 833a
Immunogen	This CD45 Antibody (MEM-28) was prepared from Human thymocytes and T lymphocytes.
Product Application Details	
Applications	Western Blot, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, In vivo assay, Immunoprecipitation, CyTOF-ready
Recommended Dilutions	Western Blot 1 ug/ml, Flow Cytometry 1 ug/ml, Immunohistochemistry 1:10- 1:500, Immunocytochemistry/ Immunofluorescence 10 ug/ml, Immunoprecipitation 1:50, Immunohistochemistry-Paraffin 1:200, In vivo assay, CyTOF-ready
Application Notes	Western blot: Sample preparation: buffer with laurylmaltoside, 2 x non-reducing SDS, Non-reducing conditions. SDS-PAGE (6% separating gel). Immunohistochemistry-Paraffin: No pre-treatment of tissue sections is essential. Immunocytochemistry: paraformaldehyde fixation can be used. Use in In-vivo reported in scientific literature (PMID 27272386). This antibody is CyTOF ready.

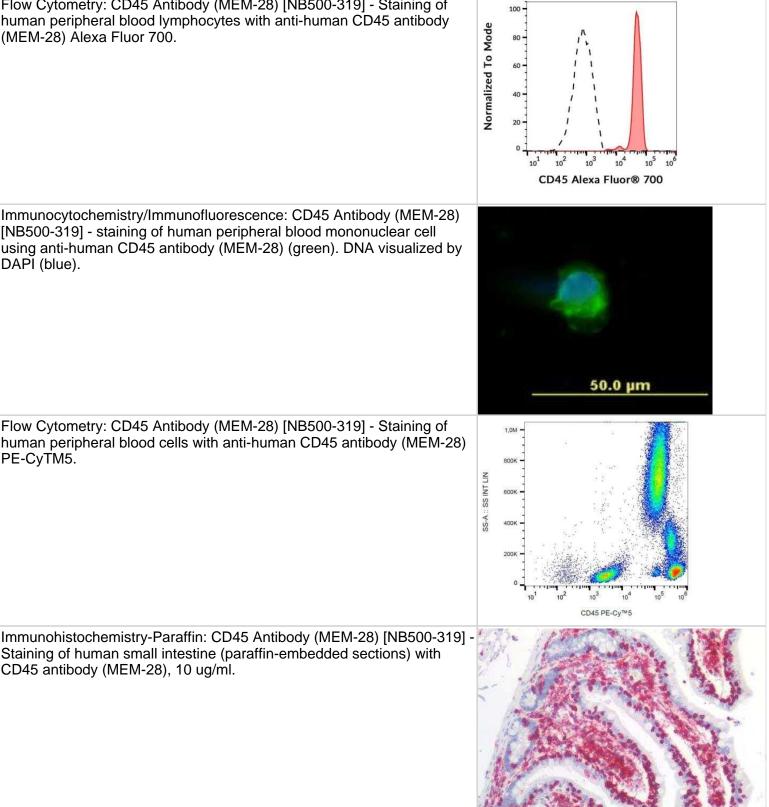




DAPI (blue).

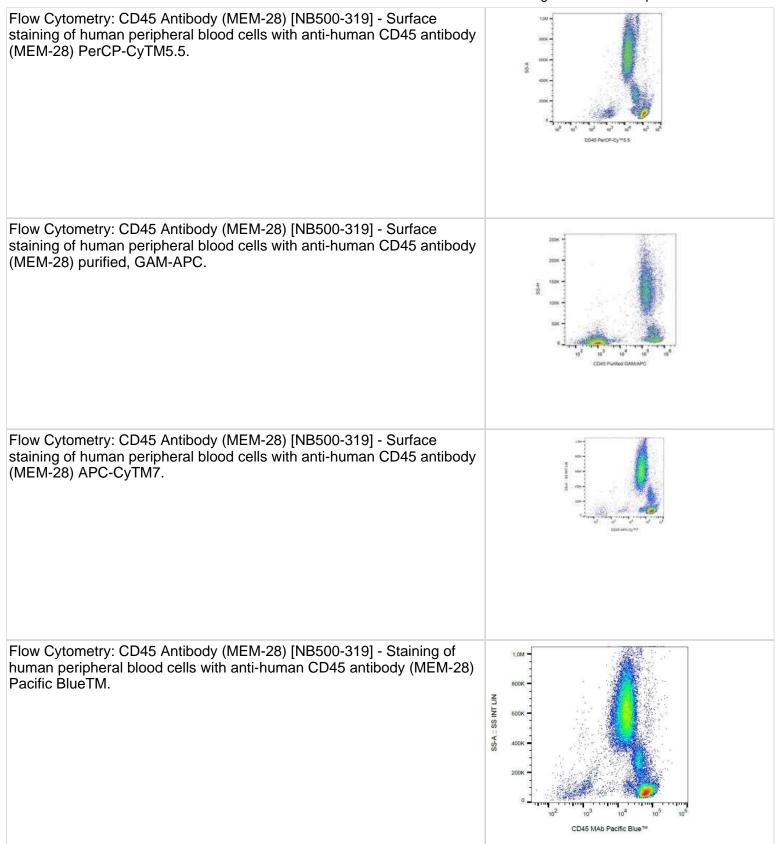
PE-CyTM5.

Flow Cytometry: CD45 Antibody (MEM-28) [NB500-319] - Staining of human peripheral blood lymphocytes with anti-human CD45 antibody (MEM-28) Alexa Fluor 700.



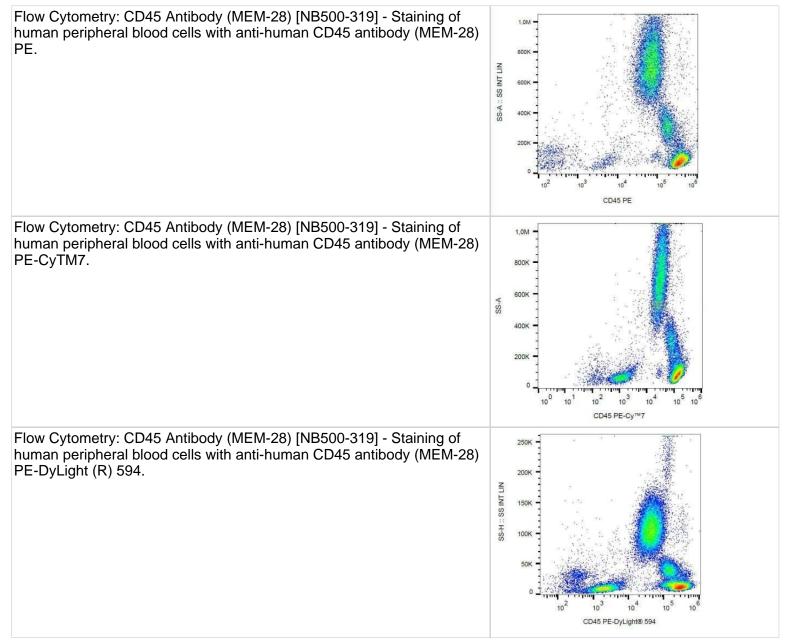
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#### **Publications**

Olah M, Menon V, Habib N et al. Single cell RNA sequencing of human microglia uncovers a subset associated with Alzheimer's disease Nature Communications 2020-11-30 [PMID: 33257666]

Liu Y, Zhou Y. Circ\_0087960 stabilizes KDM5B by reducing SKP2 mediated ubiquitination degradation and promotes osteogenic differentiation in periodontal ligament stem cells Regen Ther 2022-03-01 [PMID: 35229010] (FLOW, Human)

Details:

Citation using the FITC version of this antibody.

Taga M, Petyuk VA, White C et al. BIN1 protein isoforms are differentially expressed in astrocytes, neurons, and microglia: neuronal and astrocyte BIN1 are implicated in tau pathology Mol Neurodegener 2020-07-29 [PMID: 32727516] (IHC-P, Human)

Olah M, Menon V, Habib N et al. A single cell-based atlas of human microglial states reveals associations with neurological disorders and histopathological features of the aging brain bioRxiv 2018-06-11 (IF/IHC, Human)

Paul CD, Devine A, Bishop K et al. Human macrophages survive and adopt activated genotypes in living zebrafish. Sci Rep 2019-02-11 [PMID: 30741975] (ICC/IF, Human)

McMichael AJ et al. Leukocyte Typing III. Oxford University Press. 1987-01-01

Palchaudhuri R, Saez B, Hoggatt J et al. Non-genotoxic conditioning for hematopoietic stem cell transplantation using a hematopoietic-cell-specific internalizing immunotoxin. Nat [PMID: 27272386] (FLOW, In Vivo, Mouse)

Details:

Used the Biotin form of this antibody.

Ilangumaran S, Briol A, Hoessli DC. CD44 selectively associates with active Src family protein tyrosine kinases Lck and Fyn in glycosphingolipid-rich plasma membrane domains of human peripheral blood lymphocytes Blood [PMID: 9573028]

Details:

Used the Allophycocyanin form of this antibody.

Horejsi V, Angelisova P, Bazil V et al. Monoclonal antibodies against human leucocyte antigens II Antibodies against CD45 (T200), CD3 (T3), CD43, CD10 (CALLA), transferrin receptor (T9), a novel broadly expressed 18-kDa antigen (MEM-43) and a novel antigen of restricted expression (MEM-74) Folia Biol (Praha) 1905-06-10 [PMID: 2968928]

Details:

Used the Allophycocyanin form of this antibody.

Koethe S, Zander L, Koster S et al. CD45RB glycosylation is specifically regulated during human peripheral B cell differentiation J Leukoc Biol 2011-07-01 [PMID: 21278234]

Details:

This citation used the Allophycocyanin version of this antibody.

Drbal K, Moertelmaier M, Holzhauser C et al. Single-molecule microscopy reveals heterogeneous dynamics of lipid raft components upon TCR engagement Int Immunol 2007-05-01 [PMID: 17446208]

Details:

This citation used the Allophycocyanin version of this antibody.

Cermak L, Simova S, Pintzas A et al. Molecular mechanisms involved in CD43-mediated apoptosis of TF-1 cells; Roles of transcription Daxx expression, and adhesion molecules J Biol Chem 2002-03-08 [PMID: 11773067]

Details:

This citation used the Allophycocyanin version of this antibody.

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More publications at http://www.novusbio.com/NB500-319



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#### Products Related to NB500-319

NBL1-14981	CD45 Overexpression Lysate
HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
NBP1-97005-0.5mg	Mouse IgG1 Isotype Control (MG1)

#### 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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