

## Technical Data Sheet

**R718 Mouse Anti-Non-Human Primate CD45**

## Product Information

Material Number:	751703
Size:	50 µg
Clone:	D058-1283
Alternative Name:	Pan Leukocyte, NHP-specific; PTPRC; LCA; L-CA; Leukocyte Common Ag
Reactivity:	Tested in Development: Rhesus, Cynomolgus, Baboon
Isotype:	Mouse IgG1, κ
Application:	Flow cytometry (Qualified)
Concentration:	0.2 mg/ml
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.
Regulatory Status:	RUO

## Description

D058-1283 is a CD45 monoclonal antibody specific for non-human primate leucocytes. It was developed using Rhesus peripheral whole blood as the immunogen. It does not cross-react with human leucocytes. This antibody reacts with baboon, Rhesus and Cynomolgus Macaque leucocytes in a similar pattern to CD45 binding to leukocyte common antigen (LCA) on human cells. Immunophenotypic analysis shows that D058-1283 binds to lymphocytes, monocytes and granulocytes of non-human primate blood samples. This antibody is able to block the binding of monoclonal antibody TŪ116; a reported anti-human CD45 antibody that cross-reacts with nonhuman primate leucocytes. In Western blot analysis, the D058-1283 antibody identifies a 180-200 kDa band.

The antibody was conjugated to BD Horizon Red 718, which has been developed exclusively for BD Biosciences as a better alternative to Alexa Fluor® 700. BD Horizon Red 718 can be excited by the red laser (628 – 640 nm) and, with an Em Max around 718 nm, it can be detected using a 730/45 nm filter. Due to similar excitation and emission properties, we do not recommend using R718 in combination with APC-R700 or Alexa Fluor® 700.

## Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze. The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. The antibody was conjugated to the dye under optimum conditions that minimize unconjugated dye and antibody.

## Recommended Assay Procedure

BD™ CompBeads can be used as surrogates to assess fluorescence spillover (Compensation). When fluorochrome conjugated antibodies are bound to BD CompBeads, they have spectral properties very similar to cells. However, for some fluorochromes there can be small differences in spectral emissions compared to cells, resulting in spillover values that differ when compared to biological controls. It is strongly recommended that when using a reagent for the first time, users compare the spillover on cells and BD CompBead to ensure that BD CompBeads are appropriate for your specific cellular application.

## Suggested Companion Products

Catalog Number	Name	Size
564219	Human BD Fc Block™	50 µg
554656	Stain Buffer (FBS)	500 mL
554657	Stain Buffer (BSA)	500 mL
555899	Lysing Buffer	100 mL
349202	Lysing Solution 10X Concentrate	100 mL
566928	R718 Mouse IgG1, κ Isotype Control	50 µg

## Product Notices

1. Researchers should determine the optimal concentration of this reagent for their individual applications.

2. The production process underwent stringent testing and validation to assure that it generates a high-quality conjugate with consistent performance and specific binding activity. However, verification testing has not been performed on all conjugate lots.
3. An isotype control should be used at the same concentration as the antibody of interest.
4. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
5. Alexa Fluor® is a registered trademark of Life Technologies Corporation.
6. Please refer to <http://regdocs.bd.com> to access safety data sheets (SDS).
7. Please refer to [www.bdbiosciences.com/us/s/resources](http://www.bdbiosciences.com/us/s/resources) for technical protocols.
8. This product is provided under an Agreement between Biotium and BD Biosciences. This product, and only in the amount purchased by buyer, may be used solely for buyer's own internal research, in a manner consistent with the accompanying product literature. No other right to use, sell or otherwise transfer (a) this product, or (b) its components is hereby granted expressly, by implication or by estoppel. This product is for research use only. Diagnostic uses require a separate license from Biotium, Inc. For information on purchasing a license to this product including for purposes other than research, contact Biotium, Inc., 3159 Corporate Place, Hayward, CA 94545, Tel: (510) 265-1027. Fax: (510) 265-1352. Email: [btinfo@biotium.com](mailto:btinfo@biotium.com).

## References

Reimann KA, Waite BC, Lee-Parritz DE, et al. Use of human leukocyte-specific monoclonal antibodies for clinically immunophenotyping lymphocytes of rhesus monkeys. *Cytometry*. 1994; 17(1):102-108. (Biology).

Reeves RK, Evans TI, Gillis J, et al. Quantification of mucosal mononuclear cells in tissues with a fluorescent bead-based polychromatic flow cytometry assay. *J Immunol Methods*. 2011; 367(1-2):95-98. (Clone-specific: Flow cytometry).

Drouet M, Mayol JF, Norol F, et al. Lack of evidence of sustained hematopoietic reconstitution after transplantation of unmanipulated adult liver stem cells in monkeys. *Haematologica*. 2007; 92(2):248-251. (Clone-specific: Flow cytometry).

Brown KN, Trichel A, Barratt-Boyes SM. Parallel loss of myeloid and plasmacytoid dendritic cells from blood and lymphoid tissue in simian AIDS. *J Immunol*. 2007; 178(11):6958-6967. (Clone-specific: Flow cytometry).

## BD Biosciences

[bdbiosciences.com](http://bdbiosciences.com)

United States 877.232.8995	Canada 888.268.5430	Europe 32.53.720.550	Japan 0120.8555.90	Asia Pacific 65.6861.0633	Latin America/Caribbean 0800.771.7157
-------------------------------	------------------------	-------------------------	-----------------------	------------------------------	--

For country contact information, visit [bdbiosciences.com/contact](http://bdbiosciences.com/contact)

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for a patent infringement or other

©2020 BD. All rights reserved. Unless otherwise noted, BD, the BD Logo and all other trademarks are the property of Becton, Dickinson and Company or its affiliates.