

Technical Data Sheet

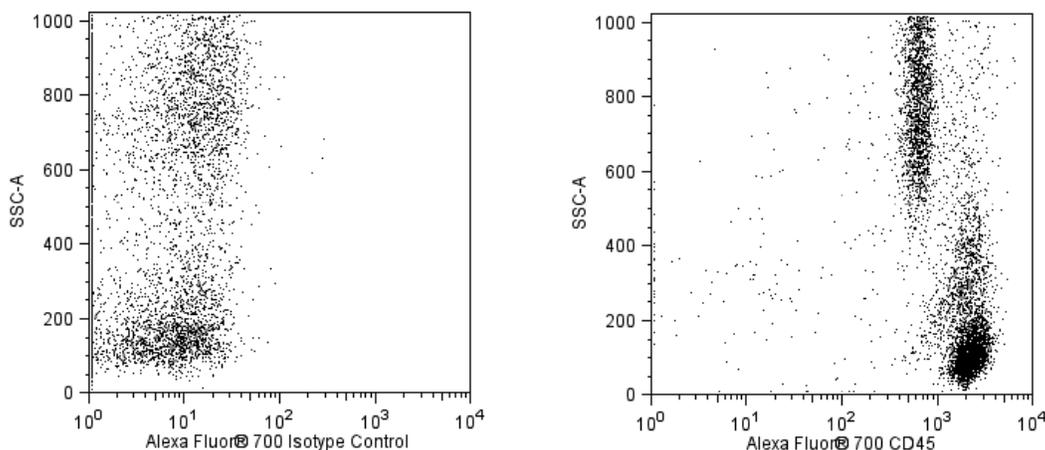
Alexa Fluor® 700 Mouse Anti-NHP CD45

Product Information

Material Number:	561288
Alternate Name:	Pan Leukocyte, NHP-specific
Size:	50 tests
Vol. per Test:	5 µl
Clone:	D058-1283
Immunogen:	Rhesus peripheral whole blood
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: Rhesus, Baboon, or Cynomolgus
Storage Buffer:	Aqueous buffered solution containing protein stabilizer and ≤0.09% sodium azide.

Description

D058-1283 is a CD45 monoclonal antibody specific for non-human primate leukocytes, developed using Rhesus peripheral whole blood as immunogen. It does not cross react with human leukocytes. This antibody reacts with Baboon, Rhesus and Cynomolgus Macaque leukocytes in a similar pattern as seen with CD45 binding to the Leukocyte Common Antigen 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 TÛ116; a reported anti-human CD45 that cross-reacts with non-human primate leukocytes. In Western blot analysis D058-1283 identifies a band of approximate molecular weight 180-200 kDa.



Flow cytometric analysis of CD45 expression on Rhesus macaque peripheral blood leukocytes. Rhesus macaque whole blood was stained with Alexa Fluor® 700 Mouse anti-NHP CD45 antibody (Cat. No. 561288; Right Panel) or with an Alexa Fluor® 700 Mouse IgG1, κ Isotype Control (Cat. No. 557882; Left Panel). The erythrocytes were lysed with BD PharmLyse™ Lysing Buffer (Cat. No. 555899). Two parameter flow cytometric dot plots showing the correlated expression of CD45 (or Ig Isotype control staining) versus side-scattered light signals were derived from events with the forward light scatter signals of viable leukocytes. Flow cytometry was performed using a BD™ LSR II Flow Cytometer System.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated to Alexa Fluor® 700 under optimum conditions, and unreacted Alexa Fluor® 700 was removed.

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

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Application Notes

Application

Flow cytometry

Routinely Tested

Suggested Companion Products

<u>Catalog Number</u>	<u>Name</u>	<u>Size</u>	<u>Clone</u>
557882	Alexa Fluor® 700 Mouse IgG1, κ Isotype Control	0.1 mg	MOPC-21
554656	Stain Buffer (FBS)	500 ml	(none)
555899	Lysing Buffer	100 ml	(none)

Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1×10^6 cells in a 100- μ l experimental sample (a test).
2. An isotype control should be used at the same concentration as the antibody of interest.
3. Alexa Fluor® is a registered trademark of Molecular Probes, Inc., Eugene, OR.
4. The Alexa Fluor®, Pacific Blue™, and Cascade Blue® dye antibody conjugates in this product are sold under license from Molecular Probes, Inc. for research use only, excluding use in combination with microarrays, or as analyte specific reagents. The Alexa Fluor® dyes (except for Alexa Fluor® 430), Pacific Blue™ dye, and Cascade Blue® dye are covered by pending and issued patents.
5. Alexa Fluor® 700 has an adsorption maximum of ~700nm and a peak fluorescence emission of ~720nm. Before staining cells with this reagent, please confirm that your flow cytometer is capable of exciting the fluorochrome and discriminating the resulting fluorescence.
6. 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.
7. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
8. Please refer to www.bdbiosciences.com/pharming/en/protocols for technical protocols.

References

Kishihara K, Penninger J, Wallace VA, et al. Normal B lymphocyte development but impaired T cell maturation in CD45-exon6 protein tyrosine phosphatase-deficient mice. *Cell*. 1993; 74(1):143-156. (Biology)

Knapp W, Dorken B, Rieber EP, et al, ed. *Leucocyte Typing IV*. New York: Oxford University Press; 1989:1-1208. (Biology)

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)