Technical Data Sheet

Alexa Fluor® 700 Mouse Anti-Human CD38

Product Information

 Material Number:
 560676

 Size:
 50 tests

 Vol. per Test:
 5 μl

 Clone:
 HIT2

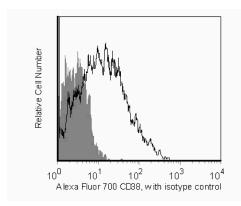
Workshop: III 155

Storage Buffer: Aqueous buffered solution containing protein stabilizer and ≤0.09% sodium

azide.

Description

The HIT2 monoclonal antibody specifically binds to CD38. CD38 is a 45 kDa type II single-chain transmembrane glycoprotein present on thymocytes, activated T cells and terminally differentiated B cells (plasma cells). Other reactive cells include monocytes, macrophages, dendritic cells and some epithelial cells. The CD38 antigen acts as an ectoenzyme that catalyzes the synthesis and hydrolysis of a Ca++ mobilizing agent, cyclic ADP-ribose. This intracellular calcium plays an important role in cell signalling pathways. Reports describe CD38 as participating in adhesion with CD31, immunoregulatory functions involving signal transduction leading to cell growth, apoptosis, and differentiation.



Flow cytometric analysis of CD38 on human lysed whole blood. Human lysed whole blood was stained with the Alexa Fluor® 700 Mouse Anti-Human CD38 antibody (unshaded) or with a Alexa Fluor® 700 Mouse IgG1, κ isotype control (shaded). Histograms were derived from gated events based on light scattering characteristics for lymphocytes. Flow cytometry was performed on a BD™ LSR II flow cytometry system.

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 Alexa Fluor® 700 under optimum conditions, and unreacted Alexa Fluor® 700 was removed.

Application Notes

Application

Flow cytometry	Routinely Tested		

Suggested Companion Products

Catalog Number	Name	Size	Clone	
557882	Alexa Fluor® 700 Mouse IgG1, κ Isotype Control	0.1 mg	MOPC-21	
555899	Lysing Buffer	100 ml	(none)	

Product Notices

- This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 × 10⁶ cells in a 100-μl experimental sample (a test).
- 2. An isotype control should be used at the same concentration as the antibody of interest.
- 3. 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.

BD Biosciences

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- 4. Alexa Fluor® is a registered trademark of Molecular Probes, Inc., Eugene, OR.
- 5. 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.
- 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/pharmingen/protocols for technical protocols.

References

McMichael AJ, Beverly PCL, Gilks W, et al, ed. Leukocyte Typing III: White Cell Differentiation Antigens. New York: Oxford University Press; 1987. (Biology) Schlossman SF, Boumsell L, Gilks W, et al, ed. Leukocyte Typing V: White Cell Differentiation Antigens. New York: Oxford University Press; 1995. (Biology)

560676 Rev. 1 Page 2 of 2