

Anti-Human CD21-152Sm

Catalog: 3152010B

Package size: 100 tests

Storage: Store at 4 °C. Do not freeze.

Cross-reactivity: Cynomolgus Monkey, Rhesus, Olive Baboon, Squirrel Monkey

Clone: BL13

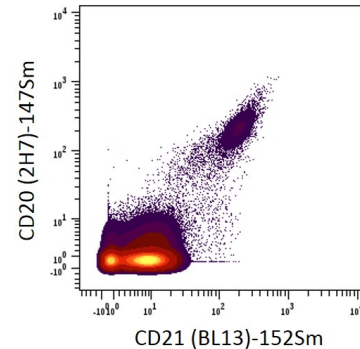
Isotype: Mouse IgG1

Formulation: Antibody stabilizer with 0.05% sodium azide

Technical Information

Validation: Each lot of conjugated antibody is quality control-tested by CyTOF[®] analysis of stained cells using the appropriate positive and negative cell staining and/or activation controls.

Recommended usage: The suggested use is 1 μ L for up to 3×10^6 live cells in 100 μ L. It is recommended that the antibody be titrated for optimal performance for each of the desired applications.



Human PBMCs stained with 147Sm-anti-CD20 (2H7) and 152Sm-anti-CD21 (BL13). Viable lymphocytes displayed in the analysis.

Description

CD21, also known as CR2, is a 145 kDa transmembrane protein expressed primarily on B cells, where it is found in complex with other membrane proteins that promote normal humoral and cellular immune responses. CD21 expression is rapidly down-regulated during activation of B cells, and is also expressed on follicular dendritic cells and subsets of T cells. CD21 ligates four classes of ligands: complement component 3 proteolytic fragments iC3b, C3dg, and C3d; the Epstein-Barr virus glycoprotein gp350/220; the low-affinity IgE receptor (CD23); and the cytokine interferon alpha (IFN α). The primary role of CD21 is to function as a B cell co-receptor for antigen-mediated B cell activation through enhancement of signal transduction. This is achieved by co-ligation via C3d and surface IgM, where C3d is covalently linked to an antigen. IFN α has been shown to be a ligand of CD21, although the physiologic importance of this interaction is unknown.

References

- Bandura, D.R. et al. "Mass cytometry: technique for real time single cell multitarget immunoassay based on inductively coupled plasma time-of-flight mass spectrometry." *Analytical Chemistry* 81 (2009): 6,813–22.
- Ornatsky, O.I. et al. "Highly multiparametric analysis by mass cytometry." *Journal of Immunological Methods* 361 (2010): 1–20.

For technical support visit <http://techsupport.fluidigm.com>. | For general support visit www.fluidigm.com/support.

For Research Use Only. Not for use in diagnostic procedures.

Information in this publication is subject to change without notice. **Safety data sheet information:** www.fluidigm.com/sds. **Patent and license information:** www.fluidigm.com/legalnotices. **EU's WEEE directive information:** www.fluidigm.com/compliance. Fluidigm, the Fluidigm logo, and CyTOF are trademarks or registered trademarks of Fluidigm Corporation in the United States and/or other countries. © 2017 Fluidigm Corporation. All rights reserved. 10/2017