SONY

Product Data Sheet

Brilliant Violet 510™ anti-human TCR Vα24-Jα18 (iNKT cell)

Catalog # / Size: 2314590 / 100 tests
2314585 / 25 tests

Clone: 6B11

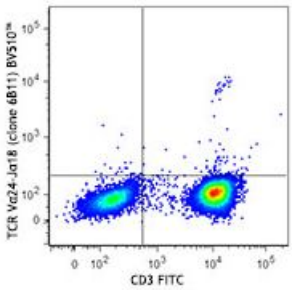
Isotype: Mouse IgG1, κ

Reactivity: Human, Other

Preparation: The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 510™ under optimal conditions.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).

Concentration: Lot-specific



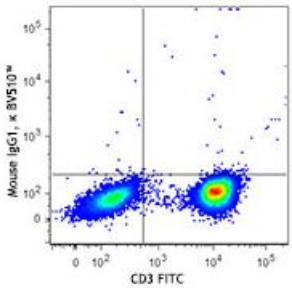
Human peripheral blood lymphocytes were stained with CD3 FITC and TCR Vα24-Jα18 (clone 6B11) Brilliant Violet 510™ (top) or mouse IgG1, κBrilliant Violet 510™ isotype control (bottom).

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤5 µl per million cells or 5 µl per 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 510™ excites at 405 nm and emits at 510 nm. The bandpass filter 510/50 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. **Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel.** Refer to your instrument manual or manufacturer for support. Brilliant Violet 510™ is a trademark of Sirigen Group Ltd.



Application Notes: The 6B11 antibody recognizes the invariant CDR3 region of TCR Vα24-JαQ.

Application References:

1. Rout N, *et al.* 2010. *PLoS One* 5:e9787. (FC)

For research use only. Not for diagnostic use. Not for resale. Sony Biotechnology Inc. will not be held responsible for patent infringement or other violations that may occur with the use of our products.

Sony Biotechnology Inc. 1730 North First Street, San Jose, CA 95112 www.sonybiotechnology.com

Description: Encoded by the TCR Vα24-Jα18 germline configuration, Vα24-JαQ is expressed on a subset of NKT cells, namely invariant NKT (iNKT). Vα24-JαQ TCR interacts with the glycolipid loaded MHC class 1b molecule CD1d, inducing activation and subsequent cytokine production. iNKT cells have been implicated in immune regulation, tumor surveillance, and host response to pathogens. While iNKT cells occur at low frequency in the blood, assorted chemokines contribute to their tissue homing potential.

Antigen References:

1. Thomas SY, *et al.* 2003. *J. Immunol.* 171:2571.
2. Exley MA, *et al.* 2008. *Eur. J. Immunol.* 38:1756.
3. Montoya CJ, *et al.* 2007. *Immunology.* 122:1.
4. Gansuvd B, *et al.* 2003. *J. Immunol.* 171:2904.

For research use only. Not for diagnostic use. Not for resale. Sony Biotechnology Inc. will not be held responsible for patent infringement or other violations that may occur with the use of our products.