## **Product Data Sheet**

## Brilliant Violet 605™ anti-human TCR Vα24-Jα18 (iNKT cell)

**Catalog #** / 2314650 / 100 tests

**Size:** 2314645 / 25 tests

Clone: 6B11

**Isotype:** Mouse IgG1, κ

Immunogen: PHA activated human lymphocytes

Reactivity: Human, Other

**Preparation:** The antibody was purified by affinity

chromatography and conjugated with Brilliant Violet 605™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 605™

and unconjugated antibody.

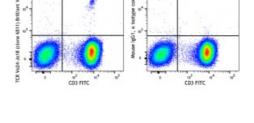
Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide and

BSA (origin USA).

Workshop Number: **HCDM** listed

Concentration: Lot-specific



Human peripheral blood lymphocytes were stained with CD3 FITC and anti-human TCR Vα24-Jα18 (iNKT cell) (clone 6B11) Brilliant Violet 605™ (left) or mouse IgG1, κ Brilliant Violet 605™ isotype control (right).

### **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  $\mu$ l per million cells in 100  $\mu$ l staining volume or 5  $\mu$ l per 100  $\mu$ l of whole blood.

Brilliant Violet 605™ excites at 405 nm and emits at 603 nm. The bandpass filter 610/20 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 605™ is a trademark of Sirigen Group Ltd.

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Application Notes:

The 6B11 antibody recognizes the invariant CDR3 region of TCR  $V\alpha24$ - $J\alphaQ$ .

Application References:

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

#### **Description:** Encoded by the TCR $V\alpha 24$ -J $\alpha 18$ germline configuration, $V\alpha 24$ -J $\alpha Q$ is

expressed on a subset of NKT cells, namely invariant NKT (iNKT).  $V\alpha24$ -J $\alpha$ Q 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.