

**Brilliant Violet 711™ anti-human TCR Vα24-Jα18 (iNKT cell)**

**Catalog # / Size:** 2314605 / 25 tests  
2314610 / 100 tests

**Clone:** 6B11

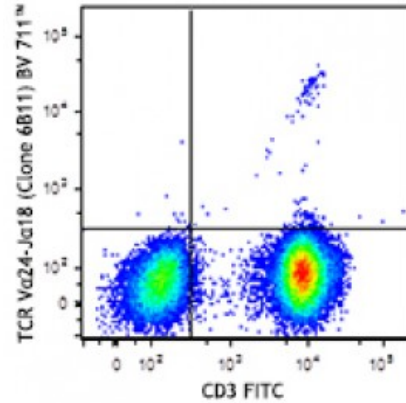
**Isotype:** Mouse IgG1, κ

**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 711™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 711™ and unconjugated antibody.

**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 711™ (top) or mouse IgG1, κ Brilliant Violet 711™ isotype control (bottom).

**Applications:**

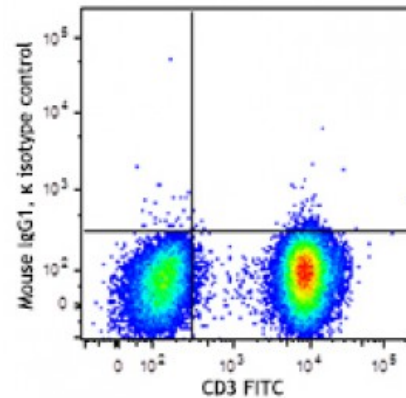
**Applications:** Flow Cytometry

**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 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 711™ excites at 405 nm and emits at 711 nm. The bandpass filter 710/50 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 711™ 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)



**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 $\alpha$ 24-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. Gansuud B, *et al.* 2003.