#### **Product Data Sheet**

#### **Brilliant Violet 785™ anti-human IgD**

**Catalog** # / 2341205 / 25 tests

**Size:** 2341210 / 100 tests

Clone: IA6-2

**Isotype:** Mouse IgG2a, κ

Immunogen: Human IgD

Reactivity: Human

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

chromatography and conjugated with Brilliant Violet 785<sup>™</sup> under optimal conditions. The solution is free of unconjugated Brilliant Violet 785<sup>™</sup>

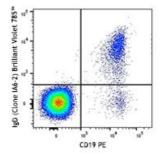
and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide and

BSA (origin USA).

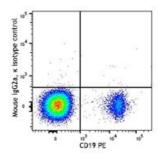
**Concentration:** 0.2



Human peripheral blood lymphocytes were stained with CD19 PE and IgD (clone IA6-2) Brilliant Violet 785™ (top) or mouse IgG2a, κ Brilliant Violet 785™ 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 785™ excites at 405 nm and emits at 785 nm. The bandpass filter 780/60 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 785™ is a trademark of Sirigen Group Ltd.

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## Application Notes:

Additional reported applications (for the relevant formats) include: immunohistochemical staining of paraformaldehyde fixed frozen sections.4

## Application References:

- 1. Chen K, et al. 2009. Nat. Immunol. 10:889.
- 2. Lee CH, et al. 2005. J. Exp. Med. 203:63.
- 3. Sutter JA, et al. 2008. Clin. Immunol. 126:282.
- 4. Li H and Pauza CD. 2015. Eur. J. Immunol. 45:298. (IHC)

#### **Description:**

IgD, a member of the immunoglobulin (Ig) family, is expressed in naïve B cells. It has 3 Ig-like domains and exists in a transmembrane and a soluble form. In general, IgD is not secreted and usually its expression is lost after the Ig isotype switch. After antigen binding, IgD signals through the CD79a/CD79b ( $Ig\alpha/Ig\beta$ ) heterodimer, resulting in the activation of the B cell.

## Antigen References:

- 1. Geisberger R, et al. 2006. Immunology 118:429.
- 2. Weller S, et al. 2005. Eur. J. Immunol. 35:2789.
- 3. Brandtzaeg P and Johansen FE. 2005. Immunol. Rev. 206:32.