SONY

# Product Data Sheet

## Brilliant Violet 510™ anti-human CD335 (NKp46)

**Catalog # / Size:** 2259620 / 100 tests
2259615 / 25 tests

**Clone:** 9E2

**Isotype:** Mouse IgG1, κ

**Immunogen:** NKp46-Fc fusion protein

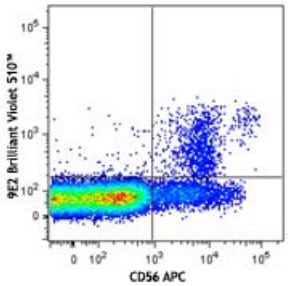
**Reactivity:** Human

**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).

**Workshop Number:** VI C-7

**Concentration:** Lot-specific




Human peripheral blood lymphocytes were stained with CD56 APC and CD335 (clone 9E2) Brilliant Violet 510™ (top) or mouse IgG1, κ Brilliant Violet 510™ isotype control (bottom).

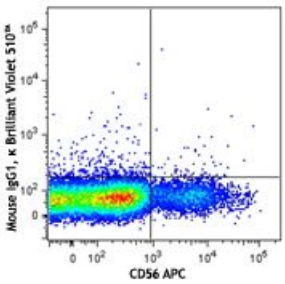
## Applications:

**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:** Clone 9E2 has been shown to block NK activation through NKp46.[6]

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**Application References:**

1. Nakajima H, *et al.* 2000. *Eur. J. Immunol.* 30:3309.
2. Kalberer CP, *et al.* 2003. *Blood* 102:127.
3. Chen Y, *et al.* 2007. *J. Immunol.* 179:2766.
4. Jarahian M, *et al.* 2009. *J. Virol.* 83:8108. PubMed
5. Correia DV, *et al.* 2011. *Blood* 118:992. (FC) PubMed
6. Achdout H. *et al.* 2010. *J. Virol.* 84:3993.

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**Description:** CD335, also known as NKp46, is a member of the natural cytotoxicity receptor (NCR) family which triggers cytotoxicity in NK cells. CD335 is directly involved in target cell recognition and lysis, and is exclusively expressed on $CD3^{-}CD56^{+}$ NK cells, suggesting it is a universal marker for NK cells. NKp46, along with NKp30 and NKp44, is referred to as a natural cytoxicity receptor (NCR) and plays a very important role in killing virus-infected tumor cells and MHC-class I-unprotected cells.

**Antigen References:**

1. Mandelboim O and Porgador A. 2001. *Int. J. Biochem. Cell Biol.* 33:1147.
2. Nakajima H, *et al.* 2000. *Eur. J. Immunol.* 30:3309.
3. Sivori S. 1999. *Eur. J. Immunol.* 29:1656.

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