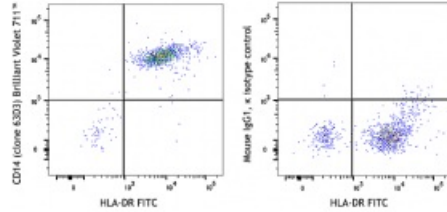


**Brilliant Violet 711™ anti-human CD14**

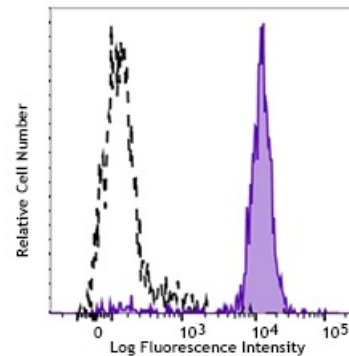
**Catalog # /** 2435700 / 100 tests  
**Size:** 2435695 / 25 tests  
**Clone:** 63D3  
**Isotype:** Mouse IgG1, κ  
**Immunogen:** Purified human peripheral blood monocytes.  
**Reactivity:** Human  
**Preparation:** The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 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).  
**Workshop Number:** HCDM listed  
**Concentration:** Lot-specific



Human peripheral blood monocytes were stained with HLA-DR FITC and Brilliant Violet 711™ anti-human CD14 (clone 63D3) (left) or Brilliant Violet 711™ mouse IgG1, κ isotype control (right).

**Applications:**

**Applications:** Flow Cytometry



Human peripheral blood monocytes were stained with Brilliant Violet 711™ anti-human CD14 (clone 63D3) (filled histogram) or Brilliant Violet 711™ mouse IgG1, κ isotype control (open histogram)

**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 in 100 µl staining volume or 5 µl per 100 µl of whole blood.

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.

This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.

**Application Notes:** Additional reported applications (for the relevant formats) include: immunohistochemistry and fluorescence microscopy.

**Application References:**

1. Fridlender ZG, *et al.* 1999. *Hum. Immunol.* 11:1028.
2. Devitt A, *et al.* 1998. *Nature* 6675:505.

---

**Description:** CD14 is a 53-55 kD glycosylphosphatidylinositol (GPI)-linked membrane glycoprotein that is also known as the LPS receptor. CD14 is expressed at high levels on monocytes and macrophages, and at lower levels on granulocytes. Some dendritic cell populations such as interfollicular dendritic cells, reticular dendritic cells, and Langerhans cells have also been reported to express CD14. As a high-affinity receptor for LPS, CD14 is involved in the clearance of gram-negative pathogens and in the upregulation of adhesion molecules and cytokine expression in monocytes and neutrophils.

**Antigen References:**

1. Stocks SC, *et al.* 1990. *Biochem. J.* 268:275.
2. Wright SD, *et al.* 1990. *Science* 4975:1431.