## **Brilliant Violet 421™ anti-human CD38**

Catalog # / Size: 2383085 / 25 tests

2383090 / 100 tests

Clone: HB-7

**Isotype:** Mouse IgG1, κ

Immunogen: BJAB human B cell line.

Reactivity: Human

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

chromatography and conjugated with Brilliant Violet 421™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 421™ and

unconjugated antibody.

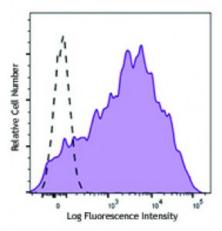
**Formulation:** Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide and BSA

(origin USA).

Workshop Number: III 155

**Concentration:** Lot-specific



Human peripheral blood lymphocytes were stained with CD38 (clone HB-7) Brilliant Violet 421™ (filled histogram) or mouse lgG1, κ Brilliant Violet 421™ isotype control (open histogram).

## 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  $421^{\text{TM}}$  excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet  $421^{\text{TM}}$  is a trademark of Sirigen Group Ltd.

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**Application** 

Notes:

Additional reported applications for the relevant formats include: indirect

immunofluorescent staining1 and Western blotting2.

Application References:

1. Tedder T, et al. 1984. Tissue Antigens. 24:140. (IF) 2. Inoue S, et al. 1997. J. Immunol. 159:5226. (WB)

3. Zhao Y, et al. 2011. J. Biol. Chem. 286:22170.

**Description:** CD38 is a 45 kD type II transmembrane glycoprotein also known as T10. It is an

ADP-ribosyl hydrolase expressed at variable levels on hematopoietic cells and in some non-hematopoietic tissues (such as brain, muscle, and kidney). In humans, it is expressed at high levels on plasma cells and activated T and B cells, natural

killer (NK) lymphocytes, myeloblasts, and erythroblasts. By functioning as both a cyclase and a hydrolase, CD38 mediates lymphocyte activation, adhesion, and the metabolism of cADPR and NAADP. CD31 is the ligand of CD38.

Antigen 1. Ferrero E, et al. 1999. J. Leukoc. Biol. 65:151. References: 2. Lund F, et al. 1995. Immunol. Today 16:469.