

**Brilliant Violet 421™ anti-mouse CD38**

**Catalog # / Size:** 1113660 / 50 µg

**Clone:** 90

**Isotype:** Rat IgG2a, κ

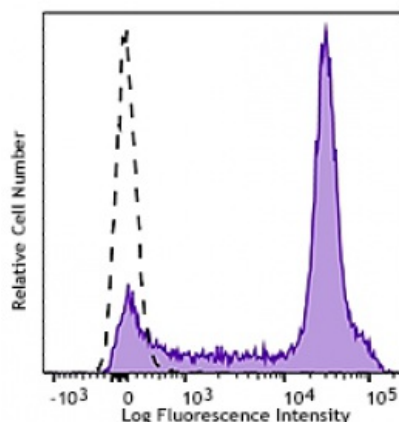
**Immunogen:** Mouse bone marrow pre-B cells

**Reactivity:** Mouse

**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).

**Concentration:** 0.2 mg/ml



C57BL/6 mouse splenocytes were stained with CD38 (clone 90) Brilliant Violet 421™ (filled histogram) or Rat IgG2a, 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 ≤0.25 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

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

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**Application Notes:** Additional reported applications (for the relevant formats) include: immunohistochemistry<sup>1,2</sup> of acetone-fixed frozen sections, and induction of B cell proliferation<sup>1</sup>.

**Application References:**

1. Barclay AN, *et al.* 1997. The Leukocyte Antigen FactsBook Academic Press.
2. Shubinsky G, *et al.* 1997. *Immunity* 7:315.
3. Cesano A, *et al.* 1998. *J. Immunol.* 160:1106.
4. Cockayne DA,

**Description:** CD38 is a 42 kD glycoprotein, also known as T10. It is an ADP-ribosyl hydrolase, expressed on B cells, NK cells, a subset of T cells, brain, muscle, and kidney. In mouse, CD38 expression is downregulated on germinal center B cells and plasma

cells, whereas this is not the case for humans. By functioning as both a cyclase and a hydrolase, CD38 mediates lymphocyte activation, as well as adhesion and metabolism of cADPR and NAADP. CD31 is the ligand of CD38.

**Antigen  
References:**

1. Barclay AN, *et al.* 1997. The Leukocyte Antigen FactsBook Academic Press.
2. Shubinsky G, *et al.* 1997. *Immunity* 7:315.
3. Cesano A, *et al.* 1998. *J. Immunol.* 160:1106.
4. Cockayne DA,