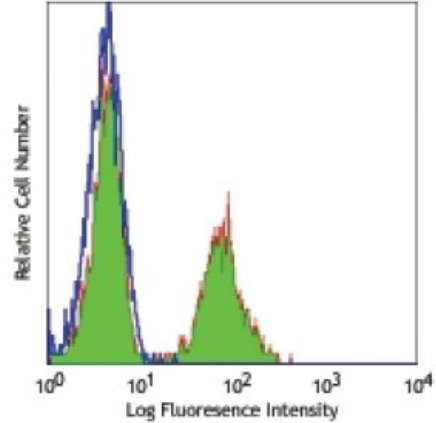


**Purified anti-human Granzyme A**

**Catalog # / Size:** 3136010 / 100 µg  
**Clone:** CB9  
**Isotype:** Mouse IgG1, κ  
**Immunogen:** Purified human Granzyme A  
**Reactivity:** Human  
**Preparation:** The antibody was purified by affinity chromatography.  
**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.  
**Concentration:** 0.5



Human peripheral blood lymphocytes intracellular stained with purified CB9, followed by anti-mouse IgG FITC

**Applications:**

**Applications:** Other

**Recommended Usage:** Each lot of this antibody is quality control tested by intracellular immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤ 0.5 microg per million cells in 100 microL volume or 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

**Application Notes:** Additional reported applications (for the relevant formats) include: immunohistochemical staining<sup>3</sup> of formalin-fixed paraffin-embedded tissue sections, and immunoprecipitation<sup>2</sup>.

**Application References:**  
 1. Trimble L, *et al.* 1998. *Blood* 91:585.  
 2. Beresford P, *et al.* 1997. *P. Natl. Acad. Sci. USA* 94:9285.  
 3. Raqib R, *et al.* 2002. *Infect. Immun.* 70:3199.  
 4. Chen H, *et al.* 2005. *J. Immunol.* 175:591.

**Description:** Granzyme A is a 28 kD disulfide-linked homodimeric protein and the most abundant of the proteases occurring in CTL granules. It is homologous to other serine esterases, including other granzymes, mast cell proteases, and neutrophil cathepsins. Granzyme B is thought to be a rapidly-acting apoptotic enzyme, while Granzyme A is slow acting. The CB9 monoclonal antibody recognizes human Granzyme A and has been shown to be useful for flow cytometry, immunoprecipitation, and immunohistochemistry (paraffin-embedded sections).

**Antigen References:**  
 1. Brune J, *et al.* 1986. *Nature* 322:268.  
 2. Fan Z, *et al.* 2003. *Nature Immunol.* 4:145.  
 3. Fan Z, *et al.* 2003. *Cell* 112:659.  
 4. Masson D, *et al.* 1987. *Cell* 49:679.