

**PerCP/Cy5.5 anti-human Granzyme A**

**Catalog # / Size:** 3136075 / 25 tests  
3136080 / 100 tests

**Clone:** CB9

**Isotype:** Mouse IgG1,  $\kappa$

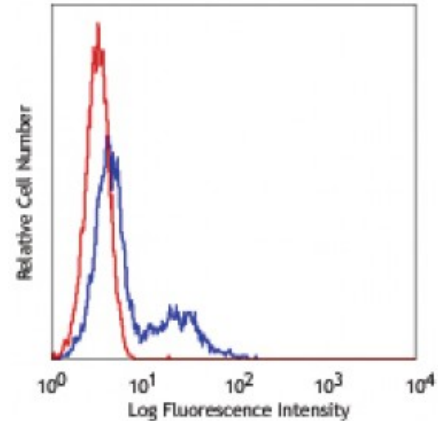
**Immunogen:** Purified human Granzyme A

**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with PerCP/Cy5.5 under optimal conditions. The solution is free of unconjugated PerCP/Cy5.5 and unconjugated antibody.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

**Concentration:** Lot-specific



Human peripheral blood lymphocytes intracellular stained with CB9 PerCP/Cy5.5

**Applications:**

**Applications:** Flow Cytometry

**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 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.

\* PerCP/Cy5.5 has a maximum absorption of 482 nm and a maximum emission of 690 nm.

**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.
5. Simmons R, *et al.* 2013. *J Virol.* 87:3087. [PubMed](#)
6. van Meijigaarden KE, *et al.* 2015. *PLoS Pathog.* 11:1004671. [PubMed](#)

**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.

