

# Product Data Sheet

## PE anti-human Granzyme A

**Catalog # / Size:** 507206 / 100 tests

**Clone:** CB9

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

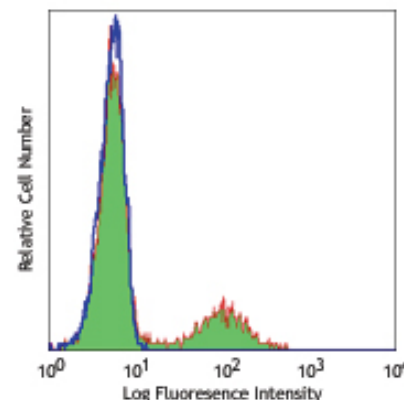
**Immunogen:** Purified human Granzyme A

**Reactivity:** Human

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

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

**Storage:** The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**



Human peripheral blood lymphocytes intracellular stained with CB9 PE

## Applications:

**Applications:** ICFC - Quality tested

**Recommended Usage:** Each lot of this antibody is quality control tested by intracellular immunofluorescent staining with flow cytometric analysis. **Test size products are transitioning from 20  $\mu$ l to 5  $\mu$ l per test.** Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100  $\mu$ l staining volume or per 100  $\mu$ l of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. Read more at [www.biolegend.com/testsize](http://www.biolegend.com/testsize) regarding the test size change.

**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.

### Related Products:

Product  
 PE anti-human Perforin  
 Cell Staining Buffer  
 Fixation Buffer  
 Permeabilization Wash Buffer (10X)  
 RBC Lysis Buffer (10X)  
 Brefeldin A Solution (1,000X)  
 Monensin Solution (1,000X)  
 PE Mouse IgG1,  $\kappa$  Isotype Ctrl (ICFC)

Clone  
 dG9

MOPC-21

### Application

ICFC  
 FC, ICC, ICFC  
 ICC, ICFC  
 ICC, ICFC, IHC  
 FC, ICFC  
 ICFC  
 ICFC  
 ICFC



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