

Pacific Blue™ anti-human Granzyme A

Catalog # / Size: 3136040 / 25 µg
3136035 / 100 µg

Clone: CB9

Isotype: Mouse IgG1, κ

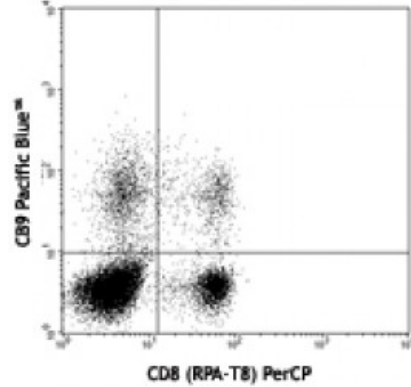
Immunogen: Purified human Granzyme A

Reactivity: Human

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

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 0.5



Human peripheral blood lymphocytes intracellularly stained with CD8 (RPA-T8) PerCP and CB9 Pacific Blue™

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 ≤ 1.0 microg per 10⁶ cells in 100 microL volume. It is highly recommended that the reagent be titrated for optimal performance for each application.

* Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

Application Notes: Additional reported applications (for the relevant formats) include: immunohistochemical staining³ of formalin-fixed paraffin-embedded tissue sections, and immunoprecipitation²

- 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. Cellerai C, *et al.* 2010. *J. Virol.* 84:3868. [PubMed](#)
 6. Yamamoto T, *et al.* 2012. *J. Virol.* 86:5877. [PubMed](#)
 7. Dimova T, *et al.* 2015. *PNAS.* 112:556. [PubMed](#)
 8. Marquardt N, *et al.* 2015. *J Immunol.* 194:2467. [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.