BioLegend
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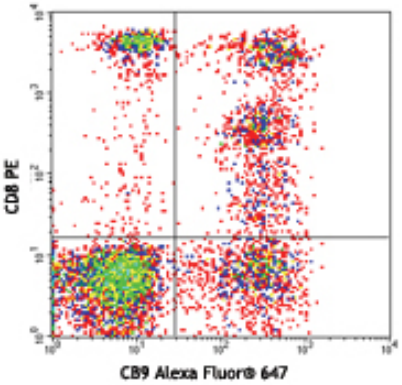
Product Data Sheet

Alexa Fluor® 647 anti-human Granzyme A

Catalog # / Size: 507214 / 100 tests
Clone: CB9
Isotype: Mouse IgG1, κ
Immunogen: Purified human Granzyme A
Reactivity: Human
Preparation: The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 647 under optimal conditions. The solution is free of unconjugated Alexa Fluor® 647.
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 surface stained with CD8 PE, then intracellularly stained with CB9 Alexa Fluor® 647

Applications:

Applications: ICFC - *Quality tested*
Recommended Usage: Each lot of this antibody is quality control tested by intracellular immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is 5 µl per million cells or 5 µl per 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

* Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633nm / 635nm.
** Alexa Fluor® is a registered trademark of Molecular Probes, Inc. Alexa Fluor® dye antibody conjugates are sold under license from Molecular Probes, Inc. for research use only, except for use in combination with microarrays and high content screening, and are covered by pending and issued patents.

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

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 granyzmes, 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	Clone	Application
Cell Staining Buffer		FC, ICC, ICFC
Alexa Fluor® 647 Mouse IgG1, κ Isotype Ctrl (ICFC)	MOPC-21	ICFC, IF

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