SONY

Product Data Sheet

Alexa Fluor® 594 anti-human Granzyme A

Catalog # / Size: 3136090 / 100 µg

Clone: CB9

Isotype: Mouse IgG1, κ

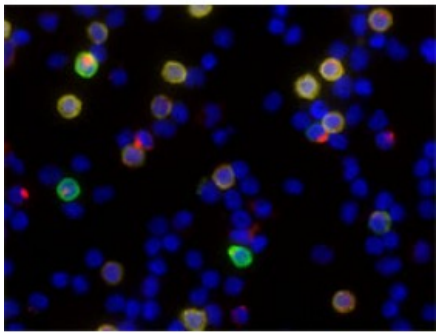
Immunogen: Purified human Granzyme A

Reactivity: Human

Preparation: The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 594 under optimal conditions. The solution is free of unconjugated Alexa Fluor® 594.

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

Concentration: Lot-specific



Human PBMCs were fixed with 2% PFA for 10 min, permeabilized with 0.5% Triton X-100 for 10 min, and blocked with 5% FBS plus 5% mouse serum for 30 min at room temperature (RT). Then, cells were stained with 5 microg/ml Granzyme A (clone CB9) Alexa Fluor

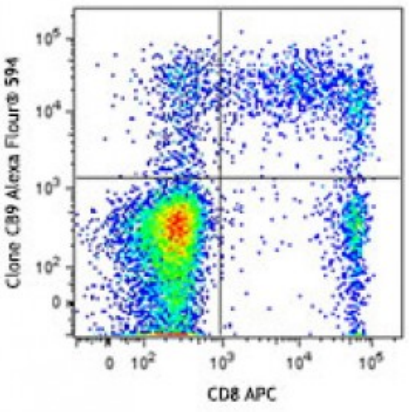
Applications:

Applications: Immunofluorescence

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescence staining. For immunofluorescence microscopy, a concentration range of 1-5 µg/ml is recommended. For flow cytometric staining, the suggested use of this reagent is ≤0.5 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

* Alexa Fluor® 594 has an excitation maximum of 590 nm, and a maximum emission of 617 nm.

Application Notes: Additional reported applications (for the relevant formats) include: immunohistochemical staining of formalin-fixed paraffin-embedded tissue sections3, and immunoprecipitation2.



Human PBMCs were stained with CD8 APC and then intracellularly stained with Granzyme A (clone CB9) Alexa Flour® 594 (above) or mouse IgG1, κ Alexa Flour® 594 isotype control (below).

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.

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.