BioLegend
From Revvity

Version: 1 Revision Date: 03/17/2026

Spark Red™ 718 anti-mouse Perforin Antibody

Catalog# / Size	154323 / 25 µg 154324 / 100 µg
Clone	S16009A
Regulatory Status	RUO
Other Names	Prf1, Pfp, Pfn, Pfn-1
Isotype	Rat IgG2a, κ
Description	Perforin is a 70 kD cytolytic protein that is expressed in the cytoplasmic granules of cytotoxic T lymphocytes (CTLs) and natural killer (NK) cells. Perforin is one of the major effector molecules used by cytotoxic T cells and NK cells to mediate targeted cell lysis.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	Mouse perforin transfected cells.
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
Preparation	The antibody was purified by affinity chromatography and conjugated with Spark Red™ 718 under optimal conditions.
Concentration	0.5 mg/mL
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. **Do not freeze**.
Application	ICFC - Quality tested
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 ≤ 0.5 µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application. * Spark Red™ 718 has a maximum excitation of 697 nm and a maximum emission of 711 nm.
Excitation Laser	Red Laser (633 nm)
Application Notes	Clone S16009A reacts with perforin from both C57BL/6 and BALB/c strains.

Antigen Details

Structure	70 kD Protein that oligomerizes for pore formation.
Distribution	CTL, NK (Cytoplasmic Granules)
Function	Target cell lysis
Cell Type	NK cells, T cells
Biology Area	Immunology

Molecular Family Cytokines/Chemokines

Antigen References

1. Podack ER, *et al.* 1988. *Immunol. Rev.* 103:203.
2. Konjar S, *et al.* 2010. *Immunology.* 131:257.
3. Trapani JA, *et al.* 2002. *Nat. Rev. Immunol.* 2:735.
4. Osinska I, *et al.* 2014. *Cent. Eur. J. Immnol.* 39:109.

Gene ID 18646

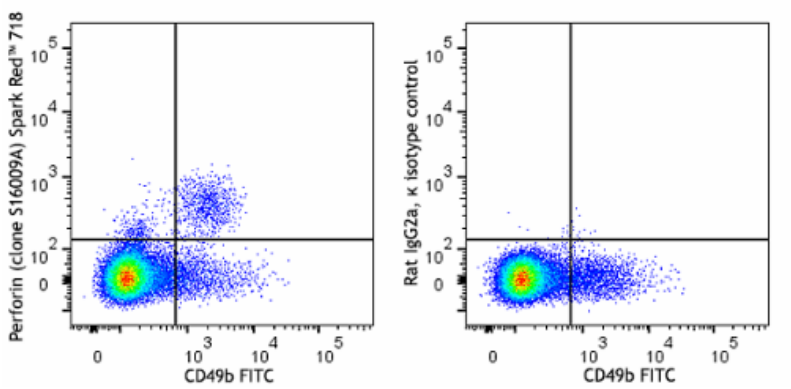
Related Protocols

- Intracellular Flow Cytometry Staining Protocol

Other Formats

PE/Dazzle™ 594 anti-mouse Perforin, APC/Fire™ 750 anti-mouse Perforin, FITC anti-mouse Perforin, Pacific Blue™ anti-mouse Perforin, Alexa Fluor® 647 anti-mouse Perforin, Brilliant Violet 421™ anti-mouse Perforin, Purified anti-mouse Perforin, APC anti-mouse Perforin, PE anti-mouse Perforin, TotalSeq™-C1545 anti-mouse Perforin Antibody, Spark Red™ 718 anti-mouse Perforin Antibody

Product Data



C57BL/6 splenocytes were surface stained with anti-mouse CD49b (clone DX5) FITC. Cells were then fixed and permeabilized with Cyto-Fast™ Fix/Perm Buffer Set (Cat. No. 426803) and intracellularly stained with anti-mouse Perforin (clone S16009A) Spark Red™ 718 (left) or rat IgG2a, κ Spark Red™ 718 isotype control (right).

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