SONY

Product Data Sheet

PerCP/Cyanine5.5 anti-mouse P2X7R

Catalog # / Size: 1343550 / 100 µg
1343545 / 25 µg

Clone: 1F11

Isotype: Rat IgG2b, κ

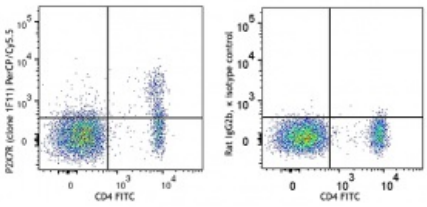
Immunogen: Murine colon mast cells

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with PerCP/Cyanine5.5 under optimal conditions. The solution is free of unconjugated PerCP/Cyanine5.5 and unconjugated antibody.

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

Concentration: 0.2 mg/ml



C57BL/6 splenocytes were stained with CD4 FITC and P2X7R (clone 1F11) PerCP/Cy5.5 (left) or rat IgG2b, κ PerCP/Cy5.5 isotype control (right).

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤ 1.0 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

* PerCP/Cyanine5.5 has a maximum absorption of 482 nm and a maximum emission of 690 nm.

Application Notes: Additional reported applications for the relevant formats include: immunoprecipitation[1], Western blotting[1], immunohistochemistry[1], *in vivo* inhibition of intestinal inflammation and mast cell activation[1].

Application References:

1. Surprenant A, *et al.* 1996. *Science.* 272:735.
2. Chused TM, *et al.* 1996. *J. Immunol.* 157:1371.
3. Gargett CE, *et al.* 1997. *Br. J. Pharmacol.* 122:911.
4. Kawamura H, *et al.* 2006. *J. Immunol.* 176:2152.
5. Pelegrin P. 2011. *Br. J. Pharmacol.* 163:908.
6. Bartlett R, *et al.* 2014. *Pharmacol. Rev.* 66:638.
7. Alves LA, *et al.* 2014. *Biochim. Biophys. Acta.* 1838:2578.

Description: P2X7R, also known as P2X7 receptor, belongs to the family of ligand-gated ion channel receptors. It is expressed on T cells, B cells, macrophages, and microglia. The receptor opens in the presence of extracellular ATP or NAD, leading to intracellular calcium mobilization. P2X7R activation requires higher concentrations of ATP compared to other P2X receptors. Longer stimulation results in larger pores, allowing passage of larger molecules. Activation of these molecules also leads to mitochondrial and cytoskeletal changes as well as IL-1β maturation and release. Ligation of P2X7 receptor can lead to membrane blebbing and cell death.

Antigen 1. Surprenant A, *et al.* 1996. *Science.* 272:735.

References: 2. Chused TM, *et al.* 1996. *J. Immunol.* 157:1371.
3. Gargett CE, *et al.* 1997. *Br. J. Pharmacol.* 122:911.
4. Kawamura H, *et al.* 2006. *J. Immunol.* 176:2152.
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