## **Product Data Sheet**

## APC anti-mouse P2X7R

Catalog # / Size: 1343530 / 100 µg

1343525 / 25 μg

Clone:

Isotype: Rat IgG2b, ĸ

Murine colon mast cells Immunogen:

Reactivity: Mouse

**Preparation:** The antibody was purified by affinity

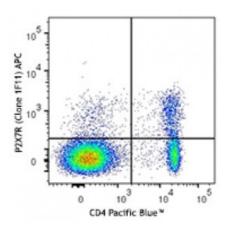
chromatography and conjugated with APC under optimal conditions. The solution is free of unconjugated APC and

unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

**Concentration:** 0.2



C57BL/6 splenocytes were stained with CD4 Pacific Blue™ and P2X7R (clone 1F11) APC (top) or rat IgG2b, κ APC isotype control (bottom).

## **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 ≤0.25 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal

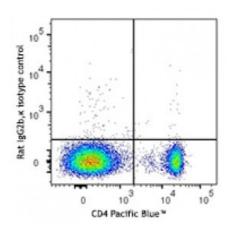
performance for each application.

**Application** Notes: Additional reported applications for the

relevant formats include:

immunoprecipitation1, Western blotting1, immunohistochemistry1, in vivo inhibition of intestinal inflammation

and mast cell activation1.



Application References:

1. Kurashima Y, et al. 2012. Nat. Commun. 3:1034. (FC, IP, WB, IHC, FA)

**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-1 $\beta$ 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, <i>et al.</i> 1997. <i>Br. J. Pharmacol.</i> 122:911. 4. Kawamura H, <i>et a</i>
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