## **Product Data Sheet**

## **Purified anti-mouse P2X7R**

**Catalog # / Size:** 1343510 / 100 μg

Clone: 1F11

**Isotype:** Rat IgG2b, κ

Immunogen: Murine colon mast cells

Reactivity: Mouse

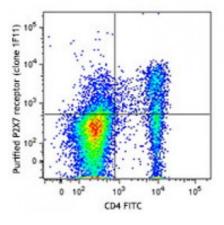
**Preparation:** The antibody was purified by affinity

chromatography.

**Formulation:** Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

**Concentration:** 0.5



C57BL/6 splenocytes were stained with CD4 FITC and purified P2X7 receptor (clone 1F11, top) or rat IgG2b, κ isotype control (bottom) followed by biotinylated anti-rat IgG2b and SAv-PE.

## **Applications:**

**Applications:** Other

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 ≤0.125 microg per million cells in 100 microL volume. It is recommended that the

volume. It is recommended that the reagent be titrated for optimal performance for each application.

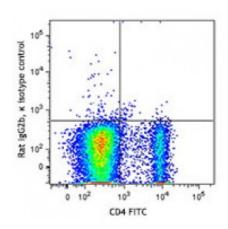
Application Notes:

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-1β maturation and release. Ligation of P2X7 receptor can lead to membrane

blebbing and cell death.

## Antigen 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 a