

PE/Cy7 anti-mouse P2X7R

Catalog # / Size: 1343535 / 25 µg
1343540 / 100 µg

Clone: 1F11

Isotype: Rat IgG2b, κ

Reactivity: Mouse

Concentration: NULL

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 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.

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.