PRODUCT INFORMATION

EP₂ Receptor Polyclonal PE Antibody
Item No. 10477

Overview and Properties

Contents: This vial contains 100 µg of peptide affinity-purified phycoerythrin (PE)-labeled IgG, lyophilized. Resuspend the IgG in 1 ml of distilled deionized water.

Synonyms: PGE₂ Receptor 2, Prostaglandin E₂ Receptor 2

Immunogen: Peptide from the C-terminal region of human EP₂

Cross Reactivity: (+) Human, mouse, and rat EP₂ receptors; (-) EP₁, EP₃, and EP₄ receptors

Form: Liquid

Storage: 4°C (as supplied)

Stability: ≥1 year

Storage Buffer: Lyophilized from PBS, pH 7.2. 0.5% BSA

Host: Rabbit

Applications: Flow cytometry (FC) and immunocytochemistry (ICC); the recommended starting dilution for FC and ICC is 1:50. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Image

Gate: P2

Jurkat cell EP₂ receptor detected with anti-EP₂: R-phycoerythrin at 4 µg/ml

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman’s Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.
Description

This polyclonal antibody is labeled with R-Phycoerythrin (PE) and can be used for immunofluorescent labeling of cellular EP2 receptor following permeabilization. R-PE absorption maxima occurs at 565>540>498 nm and the emission maximum occurs at 578 nm, however standard excitation by 488 nm lasers is sufficient to generate signal detected in the PE channel of flow cytometers. The biological effects of prostaglandin E2 (PGE2) are mediated through interaction with four distinct membrane-bound G-protein coupled EP receptors: EP1, EP2, EP3, and EP4.1-3 Binding of PGE2 to the EP2 receptor results in an increase in adenylate cyclase activity with a subsequent increase in cAMP.3,4 Pharmacologically, EP2 receptors mediate relaxation of smooth muscle and are distinguished from EP4 receptors by their sensitivity to the EP2 receptor selective agonist butaprost.1-3 The human EP2 receptor is comprised of 358 amino acids with a molecular mass of approximately 40,000.3 mRNA for the EP2 receptor is expressed in a variety of tissues including lung, placenta, spleen, intestine, kidney, and sensory neuron.3-5

References