

PRODUCT INFORMATION

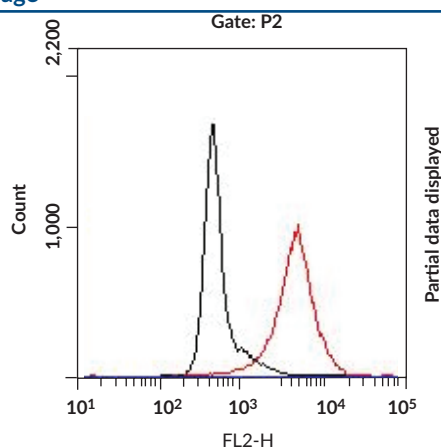


EP₂ Receptor Polyclonal PE Antibody Item No. 10477

Overview and Properties

Contents:	This vial contains 100 µg of peptide affinity purified, PE labeled polyclonal antibody
Synonyms:	PGE ₂ Receptor 2, Prostaglandin E ₂ Receptor 2
Immunogen:	Peptide from the C-terminal region of human EP ₂
Cross Reactivity:	(+) EP2 (-) EP1, EP3, EP4
Species Reactivity:	(+) Human, mouse and rat EP ₂
Uniprot No.:	P43116
Form:	Lyophilized
Storage:	4°C (as supplied)
Stability:	≥1 year
Storage Buffer:	PBS, pH 7.2 with 0.5% BSA when resuspended with 1 ml of deionized water
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



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.

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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.^{1,2} 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

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5. Southall, M.D. and Vasko, M.R. *J. Biol. Chem.* **276**(19), 16083-16091 (2001).

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