

## DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects human PTGER1 in direct ELISAs.                                                                                                                                                                                                                                      |
| <b>Source</b>             | Monoclonal Mouse IgG <sub>1</sub> Clone # 998412                                                                                                                                                                                                                            |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant                                                                                                                                                                                                                  |
| <b>Immunogen</b>          | Synthetic peptide containing human PTGER1<br>Accession # P34995                                                                                                                                                                                                             |
| <b>Conjugate</b>          | Alexa Fluor 594<br>Excitation Wavelength: 590 nm<br>Emission Wavelength: 617 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

**Immunohistochemistry** Optimal dilution of this antibody should be experimentally determined.

## PREPARATION AND STORAGE

**Shipping** The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage** Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

## BACKGROUND

Prostaglandin E2 Receptor 1/ PTGER1/EP1, a member of the G protein-coupled receptor family, is one of four receptors for Prostaglandin E2 (PGE2). Expression is highest in kidney and spleen, with very low expression in most other tissues. Stimulation of angiogenesis in primate ovulatory follicles by luteinizing hormone has been shown to be mediated by PGE2 through PTGER1 and PTGER2 receptors. In epidermis, E2 plays a role in keratinocyte differentiation. Expression and function of EP1 in carcinomas has been studied. For example, cytoplasmic and nuclear localization of EP1 in breast cancer has been reported in association with prognostic markers. And activation of EP1 mediated by COX2 causes VEGFC upregulation in lung adenocarcinomas.

## PRODUCT SPECIFIC NOTICES

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