

## DESCRIPTION

|                                                                                                                                                                                                         |                                                                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Human                                                                               |
| <b>Specificity</b>                                                                                                                                                                                      | Detects human PTGER2 in direct ELISAs.                                              |
| <b>Source</b>                                                                                                                                                                                           | Monoclonal Mouse IgG <sub>2B</sub> Clone # 607077                                   |
| <b>Purification</b>                                                                                                                                                                                     | Protein A or G purified from hybridoma culture supernatant                          |
| <b>Immunogen</b>                                                                                                                                                                                        | NS0 mouse myeloma cell line transfected with human PTGER2<br>Accession # P43116     |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 488<br>Excitation Wavelength: 488 nm<br>Emission Wavelength: 515-545 nm |
| <b>Formulation</b>                                                                                                                                                                                      | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide                        |
| *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.

|                             |                                                                        |
|-----------------------------|------------------------------------------------------------------------|
| <b>Western Blot</b>         | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunohistochemistry</b> | Optimal dilution of this antibody should be experimentally determined. |

## PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

## BACKGROUND

Prostaglandin E2 receptor (PTGER2) is a 53 kDa member of the G-protein coupled receptor family of proteins. Human PTGER2 is 358 amino acids (aa) in length and has the seven putative transmembrane domains characteristic of G-protein coupled receptors. In addition, there are four potential sites for N-linked glycosylation. Human PTGER2 shares 86% and 83% aa sequence identity with mouse and rat PTGER2, respectively. PTGER2 is present in the vasculature, the gastrointestinal, tracheobronchial, and reproductive tracts, the kidney, and also in the sphincter, dilator, and ciliary muscles in the eye. PTGER2 is linked to prostaglandin E2-mediated vasodilation and smooth muscle relaxation. It is also involved in the stimulation of secretion in the stomach and small intestine, the control of intraocular pressure, and the regulation of bone resorption.

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