

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human PTGER2 in direct ELISAs.
Source	Monoclonal Mouse IgG _{2B} Clone # 607077
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	NS0 mouse myeloma cell line transfected with human PTGER2 Accession # P43116
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

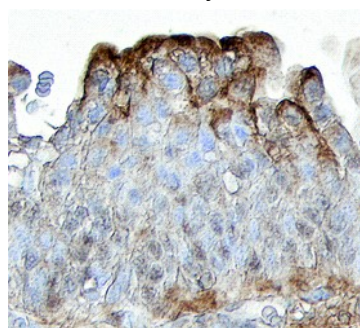
APPLICATIONS

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.

	Recommended Concentration	Sample
Western Blot	2 µg/mL	See Below
Immunohistochemistry	8-25 µg/mL	See Below

DATA

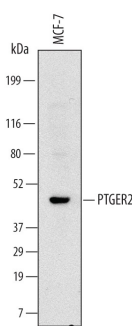
Immunohistochemistry



PTGER2 in Human Bladder.

PTGER2 was detected in immersion fixed paraffin-embedded sections of human bladder using Human PTGER2 Monoclonal Antibody (Catalog # MAB6656) at 25 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Strongest staining was localized to umbrella cells. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

Western Blot



Detection of Human PTGER2 by Western Blot. Western blot shows lysates of MCF-7 human breast cancer cell line. PVDF Membrane was probed with 2 µg/mL of Human PTGER2 Monoclonal Antibody (Catalog # MAB6656) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for PTGER2 at approximately 45 kDa (as indicated). This experiment was conducted under reducing conditions and using [Immunoblot Buffer Group 1](#).

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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.