

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human PTGER1 in direct ELISAs.
Source	Monoclonal Mouse IgG ₁ Clone # 998412
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Synthetic peptide containing human PTGER1 Accession # P34995
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.

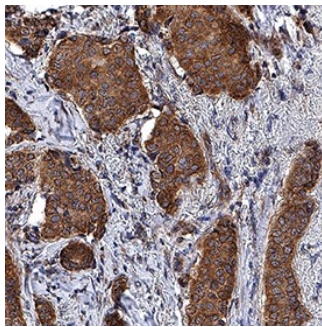
APPLICATIONS

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
Immunohistochemistry	5-25 µg/mL	See Below

DATA

Immunohistochemistry



PTGER1 in Human Breast Cancer Tissue.
PTGER1 was detected in immersion fixed paraffin-embedded sections of human breast cancer tissue using Mouse Anti-Human PTGER1 Monoclonal Antibody (Catalog # MAB10008) at 5 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC001). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm and cell surfaces. View our protocol for [IHC Staining with VisUCyte HRP Polymer Detection Reagents](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
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 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.