

DESCRIPTION

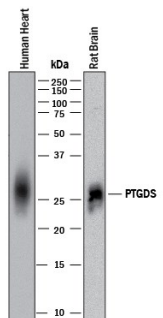
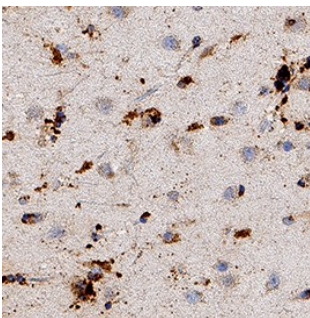
Species Reactivity	Human/Rat
Specificity	Detects human and rat PGD2 Synthase/PTGDS in direct ELISA and Western blots.
Source	Monoclonal Mouse IgG _{2A} Clone # 997303
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human PGD2 Synthase/PTGDS Met1-Gln190 Accession # P41222
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	0.5 µg/mL	See Below
Immunohistochemistry	5-25 µg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human and Rat PGD2 Synthase/PTGDS by Western Blot. Western blot shows lysates of human heart tissue and rat brain tissue. PVDF membrane was probed with 0.5 µg/mL of Mouse Anti-Human/Rat PGD2 Synthase/PTGDS Monoclonal Antibody (Catalog # MAB10099) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for PGD2 Synthase/PTGDS at approximately 26 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunohistochemistry</p>  <p>PGD2 Synthase/PTGDS in Human Brain. PGD2 Synthase/PTGDS was detected in immersion fixed paraffin-embedded sections of human brain (caudate nucleus) using Mouse Anti-Human/Rat PGD2 Synthase/PTGDS Monoclonal Antibody (Catalog # MAB10099) 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 nuclei in neurons. View our protocol for IHC Staining with VisUCyte HRP Polymer Detection Reagents.</p>
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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-H2 D-isomerase or PGD2 synthase (PTGDS) is an enzyme that catalyzes the conversion of Prostaglandin H2 (PGH2) to Prostaglandin D2 (PGD2), a prostaglandin involved in smooth muscle contraction/relaxation and a potent inhibitor of platelet aggregation. Prostaglandin D2 synthase is used clinically as a diagnostic marker for Cerebrospinal fluid rhinorrhea, important in the assessment of head trauma severity. It has been also proposed that the urinary and serum levels of PTGDS may be also a marker of renal damage in diabetes mellitus and hypertension.