

## DESCRIPTION

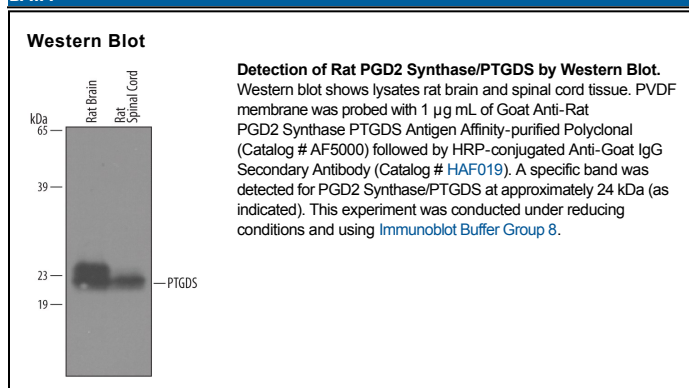
<b>Species Reactivity</b>	Rat
<b>Specificity</b>	Detects rat PGD2 Synthase/PTGDS in direct ELISAs and Western blots.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant rat PGD2 Synthase/PTGDS Gln25-Glu189 Accession # P22057
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied 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
<b>Western Blot</b>	1 µg/mL	See Below

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

PGD2 Synthase (prostaglandin D2 synthase; also PG-H2 D-isomerase) is a 26 kDa, monomeric member of the lipocalin family of proteins. It is expressed by neurons and astrocytes, retinal pigment epithelium and Sertoli cells. It catalyzes the conversion of PGH<sub>2</sub> to PGD<sub>2</sub>, thereby influencing sleep and body temperature. It also transports retinoic acid. The rat PGD2 precursor is 189 amino acids (aa) in length. It contains a signal sequence (aa 1-24) plus a lipocalin region that serves both as a catalytic site and hydrophobic molecule transporter (aa 40-187). PGD2 is both intracellular and secreted. When secreted, PGD2 is called β-Trace. One splice variant is likely intracellular and shows an 11 aa substitution for the first 52 amino acids. Over aa 25-189, rat PGD2 shares 72% and 88% aa identity with human and mouse PGD2, respectively.