

## Rat PGD2 Synthase/PTGDS Alexa Fluor® 594-conjugated Antibody

Antigen Affinity-purified Polyclonal Goat IgG Catalog Number: AF5000T 100 µg

DESCRIPTION	
Species Reactivity	Rat
Specificity	Detects rat PGD2 Synthase/PTGDS in direct ELISAs and Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant rat PGD2 Synthase/PTGDS Gln25-Glu189 Accession # P22057
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
Formulation	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.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE	
Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

## **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.

## PRODUCT SPECIFIC NOTICES

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Rev. 9/16/2025 Page 1 of 1

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