

# Product Information



## IP Receptor (human) Blocking Peptide

Catalog No. 10005519

Prostaglandin I<sub>2</sub> (PGI<sub>2</sub>) is a potent vasorelaxant and inhibitor of human platelet aggregation.<sup>1</sup> The PGI<sub>2</sub> receptor (IP receptor) also participates in signal transduction of the pain response, cardioprotection, and inflammation.<sup>2-6</sup> Cloning of the murine and human IP receptors revealed a significant amino-terminal truncation of the human IP receptor compared to the murine receptor.<sup>7,8</sup> The predicted migration of the deglycosylated IP receptor is 40 kDa but bands at either 67 or 40 kDa may be detected depending on the degree of post-translational modification of the sample.<sup>9</sup>

### Laboratory Procedures

This vial contains 200 µg of lyophilized peptide. For long term storage, we suggest that the IP receptor blocking peptide be stored as supplied at -20°C. It will be stable for at least two years. This blocking peptide can be used in conjunction with Cayman's IP Receptor (human) Polyclonal Antibody (Catalog No. 10005518) to block protein-antibody complex formation during immunochemical detection of the IP receptor.

Reconstitute the lyophilized peptide with 200 µl of PBS or distilled water. Store this peptide solution at -20°C. It will be stable for at least two years. To block antibody/protein complex formation, the following procedure is recommended:

1. Mix the IP Receptor (human) Polyclonal Antibody (Catalog No. 10005518) and blocking peptide together in a 1:2 (v/v) ratio in a microfuge tube. For example, mix 20 µl of antibody and 40 µl of peptide.\*
2. Incubate for 1 hour at room temperature with occasional mixing prior to further dilution and application of the mixture to the immunoblot.
3. Dilute the mixture to the final working antibody concentration and apply to the slide or membrane as usual.

\*This is a recommended mixture. The minimum amount of peptide needed for complete blocking has not been precisely determined and may vary depending on the sample being analyzed. The amount of peptide required may need to be increased if sufficient blocking does not occur.

### References

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### Related Product

IP Receptor (human) Polyclonal Antibody - Cat. No. 10005518

**WARNING: THIS PRODUCT IS NOT INTENDED OR APPROVED FOR HUMAN OR VETERINARY USE. USE OF THIS PRODUCT FOR HUMAN OR ANIMAL TESTING IS EXTREMELY HAZARDOUS AND MAY RESULT IN DISEASE, SEVERE INJURY, OR DEATH.**

#### MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent via email to your institution.

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### Cayman Chemical

#### Mailing address

1180 E. Ellsworth Road  
Ann Arbor, MI  
48108 USA

#### Phone

(800) 364-9897  
(734) 971-3335

#### Fax

(734) 971-3640

#### E-Mail

custserv@caymanchem.com

#### Web

www.caymanchem.com