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# Product Information



## IP Receptor (mouse) Blocking Peptide

Item No. 360070

Prostaglandin I<sub>2</sub> (PGI<sub>2</sub>) is a potent vasorelaxant and inhibitor of human platelet aggregation acting *via* the G-protein coupled PGI<sub>2</sub> receptor (IP receptor).<sup>1</sup> The IP receptor also participates in the signal transduction of the pain response, cardioprotection, and inflammation.<sup>2-6</sup> Cloning of the mouse and human IP receptors revealed a significant amino-terminal truncation of the human IP receptor compared to the mouse receptor.<sup>7,8</sup> Accordingly, the Cayman IP receptor (mouse) polyclonal antibody is useful only for immunochemical analysis of mouse and rat samples.

### Laboratory Procedures

This vial contains 200 µg of lyophilized peptide. This blocking peptide can be used in conjunction with Cayman's IP Receptor (mouse) Polyclonal Antibody (Item No. 160070) 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 should be stable for at least three years. To block antibody/protein complex formation, the following procedure is recommended:

1. Mix the IP Receptor (mouse) Polyclonal Antibody (Item No. 160070) and blocking peptide together in a 1:4 (v/v) ratio in a microfuge tube. For example, mix 20 µl of antibody and 80 µl of peptide.\*
2. Incubate for one 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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