

# Product Information



## FP Receptor Polyclonal Antibody

Item No. 101802

**Synonym:** Prostaglandin F<sub>2α</sub> Receptor  
**Contents:** This vial contains 250 µg peptide affinity-purified IgG in 500 µl TBS, pH 7.4, containing 50% glycerol, 0.5 mg/ml BSA, and 0.02% sodium azide. This is sufficient for ten (10 x 10 cm) immunoblots.

**Host:** Rabbit

**Antigen:** Synthetic peptide from mouse FP receptor amino acids 2-16 (SMNSSKQPVSPAAGL) conjugated to KLH. Homology of peptide antigen with FP receptor from other species:<sup>1-5</sup>

Mouse	S M N S S K Q P V S P A A G L
Human	S M N n S K Q I V S P A A a L
Cat	S M N n S K Q P V S P e A G L
Rat	S i N S S K Q P a S s A A G L
Cow	S t N S S i Q P V S P e s e L
Sheep	S t N n S v Q P V S P A s e L
Pig	S M N S S K e P a S P A t e L

**Cross-reactivity:** (+) Mouse, rat, human, bovine, and ovine FP receptor; other species not tested

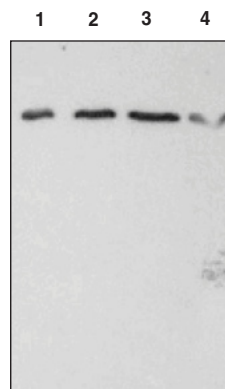
**Stability:** ≥1 year at -20°C

**Applications:** This polyclonal antibody can be used for detection of the FP receptor (64 kDa) by Western blot at a dilution of 1:200. Immunohistochemistry and immunocytochemistry have not been attempted and proper working dilutions should be determined empirically.

The prostaglandin F<sub>2α</sub> receptor (FP receptor) is a G protein-coupled receptor known to elicit smooth muscle contraction in a variety of tissues.<sup>6</sup> FP receptor mRNA is found in reproductive, gastric, neural, and ocular tissues as well as specialized cells of the kidney.<sup>2,3,7,8</sup> Two FP receptor isoforms, FP<sub>A</sub> and FP<sub>B</sub> have been identified in sheep.<sup>5</sup> FP<sub>B</sub> receptor is truncated at the carboxy-terminus thereby preventing desensitization (which normally occurs by protein kinase C phosphorylation of FP<sub>A</sub>) and produces aberrant signalling in FP<sub>B</sub> transfectants.<sup>9,10</sup> The existence of a truncated human FP isoform responsible for signal-amplification contributing to luteolysis, cell growth, or malignant transformation is currently unknown.<sup>5,9-11</sup>

### References

1. Sugimoto, Y., Hasumoto, K., Namba, T., *et al. J. Biol. Chem.* **269**, 1356-1360 (1994).
2. Abramovitz, M., Boie, Y., Nguyen, T., *et al. J. Biol. Chem.* **269**, 2632-2636 (1994).
3. Lake, S., Gullberg, H., Wahlqvist, J., *et al. FEBS Lett.* **355**, 317-325 (1994).
4. Sakamoto, K., Ezashi, T., Miwa, K., *et al. J. Biol. Chem.* **269**, 3881-3886 (1994).
5. Pierce, K.L., Bailey, T.J., Hoyer, P.B., *et al. J. Biol. Chem.* **272**, 883-887 (1997).
6. Narumiya, S., Sugimoto, Y., and Ushikubi, F. *Physiol. Rev.* **79**, 1193-1226 (1999).
7. Kitanaka, J., Hasimoto, H., Sugimoto, Y., *et al. Prostaglandins* **48**, 31-41 (1994).
8. Mukhopadhyay, P., Bian, L., Yin, H., *et al. Invest. Ophthalmol. Vis. Sci.* **42(2)**, 424-428 (2001).
9. Fujino, H., Srinivasan, D., Pierce, K.L., *et al. Mol. Pharmacol.* **57**, 353-358 (2000).
10. Fujino, H. and Regan, J.W. *J. Biol. Chem.* **276(16)**, 12489-12492 (2001).
11. Sugimoto, Y., Yamasaki, A., Segi, E., *et al. Science* **277**, 681-683 (1997).



Lane 1: Bovine cornea (20 µg)  
Lane 2: Bovine cornea (30 µg)  
Lane 3: Bovine cornea (40 µg)  
Lane 4: Ram seminal vesicle microsomes (30 µg)

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**WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY. NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

### MATERIAL SAFETY DATA

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