



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



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- Trockeneiszuschlag
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# PRODUCT INFORMATION



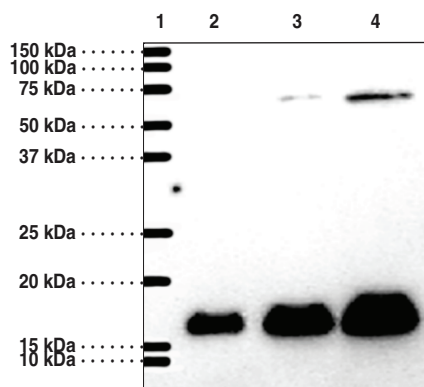
## Prostaglandin E Synthase-1 (microsomal) Polyclonal Antibody

Item No. 160140

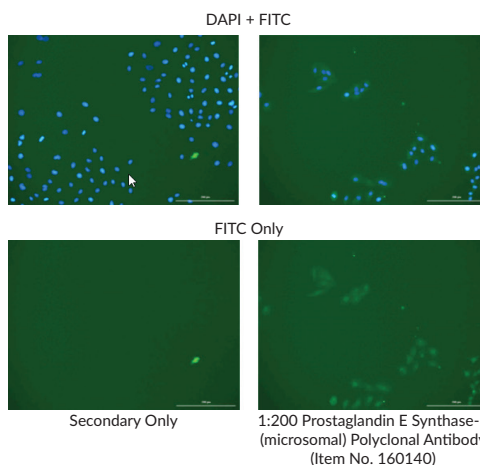
### Overview and Properties

<b>Contents:</b>	This vial contains 500 µl of peptide-affinity purified polyclonal antibody.
<b>Synonyms:</b>	Membrane-Associated PGES-1, MGST1-L1, mPGES-1, mPGE Synthase-1, PIG12, Prostaglandin H/E Isomerase
<b>Immunogen:</b>	Peptide from an internal region of human mPGES-1
<b>Species Reactivity:</b>	(+) Human, mouse, ovine, and rat; other species not tested
<b>Uniprot No.:</b>	O14684
<b>Form:</b>	Liquid
<b>Storage:</b>	-20°C (as supplied)
<b>Stability:</b>	≥3 years
<b>Host:</b>	Rabbit
<b>Storage Buffer:</b>	PBS, pH 7.2, with 50% glycerol and 0.02% sodium azide
<b>Application:</b>	Immunofluorescence (IF), Western blot (WB); the recommended starting dilution for is 1:200. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

### Images



Lane 1: Precision Plus Protein Standard  
Lane 2: Ram Seminal Vesicles (2 µg)  
Lane 3: Ram Seminal Vesicles (5 µg)  
Lane 4: Ram Seminal Vesicles (10 µg)



Immunofluorescence analysis of paraformaldehyde-fixed, A549 cells. After incubation with Prostaglandin E Synthase-1 (microsomal) Polyclonal Antibody (Item No. 160140), at a 1:200 dilution (or negative control) cells were incubated with FITC labeled anti-rabbit IgG (Item No. 10006588), followed by DAPI nuclear stain. Images show FITC alone or both fluorescence channels to highlight nuclear staining (where applicable).

WARNING  
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA  
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY  
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# PRODUCT INFORMATION



## Description

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Prostaglandin E Synthase-1 (PGES-1) catalyzes the isomerization of  $\text{PGH}_2$  (Item No. 17020) to  $\text{PGE}_2$  (Item No. 14010).  $\text{PGE}_2$  is one of the primary COX products of arachidonic acid (item No. 90010) and one of the most widely investigated PGs. Its activity influences inflammation, fertility and parturition, gastric mucosal integrity, and immune modulation.<sup>1-4</sup> PGES-1 is a 16 kDa membrane-associated protein with glutathione-dependent activity.<sup>5</sup> The mRNA for PGES-1 is expressed in a variety of tissues including prostate, testes, and small intestine, as well as in A549 and HeLa cells.<sup>5</sup> PGES-1 protein expression is increased in A549 cells following treatment with  $\text{IL-1}\beta$ .<sup>5</sup>

## References

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1. Willis, A.L. and Cornelsen, M. Repeated injection of prostaglandin  $\text{E}_2$  in rat paws induces chronic swelling and a marked decrease in pain threshold. *Prostaglandins* **3(3)**, 353-357 (1973).
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3. Robert, A., Schultz, J.R., Nezamis, J.E., *et al.* Gastric antisecretory and antiulcer properties of  $\text{PGE}_2$ , 15-methyl  $\text{PGE}_2$ , and 16,16-dimethyl  $\text{PGE}_2$ . Intravenous, oral and intrajejunal administration. *Gastroenterology* **70(3)**, 359-370 (1976).
4. Arvind, P., Papavassiliou, E.D., Tsioulis, G.J., *et al.* Prostaglandin  $\text{E}_2$  down-regulates the expression of HLA-DR antigen in human colon adenocarcinoma cell lines. *Biochemistry* **34(16)**, 5604-5609 (1995).
5. Jakobsson, P.-J., Thorén, S., Morgenstern, R., *et al.* Identification of human prostaglandin E synthase: A microsomal, glutathione-dependent, inducible enzyme, constituting a potential novel drug target. *Proc. Natl. Acad. Sci. USA* **96(13)**, 7220-7225 (1999).

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