



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



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# PRODUCT INFORMATION

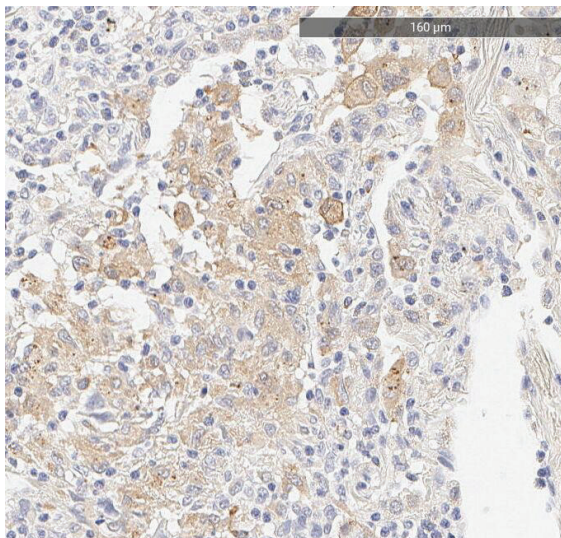
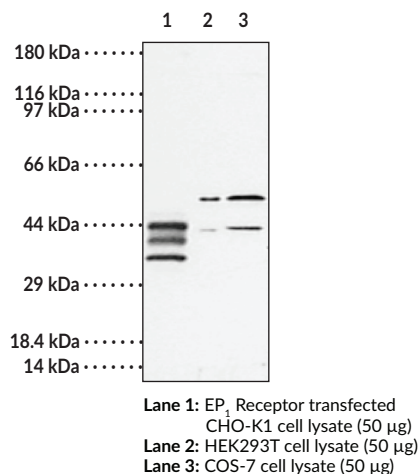


## EP<sub>1</sub> Receptor Polyclonal Antibody Item No. 101740

### Overview and Properties

<b>Contents:</b>	This vial contains 500 µl peptide affinity-purified polyclonal antibody.
<b>Synonyms:</b>	PGE <sub>2</sub> Receptor 1, Prostaglandin E <sub>2</sub> Receptor 1
<b>Immunogen:</b>	Synthetic peptide from the C-terminal region of human EP <sub>1</sub>
<b>Cross Reactivity:</b>	(-) EP <sub>2</sub> , EP <sub>3</sub> , and EP <sub>4</sub> receptors
<b>Species Reactivity:</b>	(+) Human, mouse, and rat; other species not tested
<b>Uniprot No.:</b>	P34995
<b>Form:</b>	Liquid
<b>Storage:</b>	-20°C (as supplied)
<b>Stability:</b>	≥3 years
<b>Storage Buffer:</b>	PBS, pH 7.2, with 50% glycerol and 0.02% sodium azide
<b>Host:</b>	Rabbit
<b>Applications:</b>	Immunofluorescence (IF), Immunohistochemistry (IHC), and Western blot (WB); the recommended starting dilution is 1:200. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

### Images



Immunohistochemistry analysis of formalin-fixed, paraffin-embedded (FFPE) human lung tissue after heat induced antigen retrieval in pH 6.0 citrate buffer. After incubation with EP<sub>1</sub> receptor polyclonal antibody (Item No. 101740) at a 1:200 dilution, slides were incubated with biotinylated secondary antibody, followed by alkaline phosphatase-streptavidin and chromogen (DAB).

**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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The biological effects of PGE<sub>2</sub> are mediated through interaction with four distinct membrane-bound G-protein coupled EP receptors: EP<sub>1</sub>, EP<sub>2</sub>, EP<sub>3</sub>, and EP<sub>4</sub>.<sup>1,2</sup> Binding of PGE<sub>2</sub> to the EP<sub>1</sub> receptor results in an increase in phosphatidyl inositol turnover with subsequent increase in intracellular free Ca<sup>2+</sup>.<sup>3,4</sup> Pharmacologically, EP<sub>1</sub> receptors mediate contraction of smooth muscle.<sup>1</sup> The human EP<sub>1</sub> receptor is comprised of 402 amino acids with a molecular mass of approximately 42,000.<sup>3</sup> The EP<sub>1</sub> receptor is expressed in a variety of tissues, including the kidney, lung, and sensory neuron.<sup>3-5</sup> Within the kidney, the EP<sub>1</sub> receptor is expressed at high levels in the cortical, outer medullary, and inner medullary collecting duct.<sup>6</sup>

## References

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1. Coleman, R.A., Smith, W.L., and Narumiya, S. Classification of prostanoid receptors: Properties, distribution, and structure of the receptors and their subtypes. *Pharmacol. Rev.* **46**, 205-229 (1994).
2. Coleman, R.A., Eglen, R.M., Jones, R.L., *et al.* Classification of prostanoid receptors IUPHAR receptor compendium. *IUPHAR Compendium* 1-12 (1997).
3. Funk, C.D., Furci, L., Fitzgerald, G.A., *et al.* Cloning and expression of a cDNA for the human prostaglandin E receptor EP<sub>1</sub> subtype. *J. Biol. Chem.* **268**, 26767-26772 (1993).
4. Honda, A., Sugimoto, Y., Namba, T., *et al.* Cloning and expression of a cDNA for mouse prostaglandin E receptor EP<sub>2</sub> subtype. *J. Biol. Chem.* **268**, 7759-7762 (1993).
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6. Breyer, M.D., Davis, L., Jacobson, H.R., *et al.* Differential localization of prostaglandin E receptor subtypes in human kidney. *Am. J. Physiol.* **270**, F912-F918 (1996).

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