

# **PSGR Polyclonal Antibody**

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP54720

## **Specification**

Physical State

# **PSGR Polyclonal Antibody - Product Information**

Application WB, IHC-P, IHC-F, IF, ICC, E

Primary Accession

Reactivity

Host

Clonality

Calculated MW

Rat, Bovine

Rabbit

Polyclonal

35 KDa

Immunogen KLH conjugated synthetic peptide derived

Liquid

laG

from human PSGR

Epitope Specificity 151-250/320

Purity
affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02%

Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Cell membrane; Multi-pass membrane

protein.

SIMILARITY Belongs to the G-protein coupled receptor

1 family.

Important Note This product as supplied is intended for

research use only, not for use in human, therapeutic or diagnostic applications.

# **Background Descriptions**

Olfactory receptors interact with odorant molecules in the nose, to initiate a neuronal response that triggers the perception of a smell. The olfactory receptor proteins are members of a large family of G-protein-coupled receptors (GPCR) arising from single coding-exon genes. Olfactory receptors share a 7-transmembrane domain structure with many neurotransmitter and hormone receptors and are responsible for the recognition and G protein-mediated transduction of odorant signals. The olfactory receptor gene family is the largest in the genome. The nomenclature assigned to the olfactory receptor genes and proteins for this organism is independent of other organisms. [provided by RefSeq, Jul 2008]

### **PSGR Polyclonal Antibody - Additional Information**

# **Gene ID 81285**

# **Other Names**

Olfactory receptor 51E2, HPRAJ, Olfactory receptor OR11-16, Prostate-specific G-protein coupled receptor, OR51E2 (<a

href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=15195"

target="\_blank">HGNC:15195</a>)



# Target/Specificity

Exclusively expressed in the prostate. Up-regulated in prostate cancers.

#### **Dilution**

<span class ="dilution\_WB">WB~~1:1000</span><br \><span class
="dilution\_IHC-P">IHC-P~~N/A</span><br \><span class
="dilution\_IHC-F">IHC-F~~N/A</span><br \><span class
="dilution\_IF">IF~~1:50~200</span><br \><span class ="dilution\_ICC">ICC~~N/A</span><br \><span class ="dilution\_E">E~~N/A</span>

#### **Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

### Storage

Store at -20  $^{\circ}$ C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4  $^{\circ}$ C.

## **PSGR Polyclonal Antibody - Protein Information**

Name OR51E2 (HGNC:15195)

#### **Function**

Olfactory receptor (PubMed: <a href="http://www.uniprot.org/citations/27226631" target=" blank">27226631</a>, PubMed:<a href="http://www.uniprot.org/citations/29249973" target=" blank">29249973</a>). Activated by the odorant, beta-ionone, a synthetic terpenoid (PubMed:<a href="http://www.uniprot.org/citations/19389702" target=" blank">19389702</a>, PubMed: <a href="http://www.uniprot.org/citations/27226631" target=" blank">27226631</a>, PubMed:<a href="http://www.uniprot.org/citations/29249973" target=" blank">29249973</a>). The activity of this receptor is probably mediated by G-proteins leading to the elevation of intracellular Ca(2+), cAMP and activation of the protein kinases PKA and MAPK3/MAPK1 (PubMed:<a href="http://www.uniprot.org/citations/27226631" target=" blank">27226631</a>, PubMed: <a href="http://www.uniprot.org/citations/29249973" target=" blank">29249973</a>). Stimulation of OR51E2 by beta-ionone affects melanocyte proliferation, differentiation, and melanogenesis (PubMed:<a href="http://www.uniprot.org/citations/27226631" target=" blank">27226631</a>). Activation of OR51E2 by beta-ionone increases proliferation and migration of primary retinal pigment epithelial (RPE) cells (PubMed: <a href="http://www.uniprot.org/citations/29249973" target="\_blank">29249973</a>). Activated also by the short-chain fatty acids (SCFA) acetate and propionate. In response to SCFA, may positively regulate renin secretion and increase blood pressure (PubMed:<a href="http://www.uniprot.org/citations/23401498" target=" blank">23401498</a>). May also be activated by steroid hormones and regulate cell proliferation (PubMed:<a href="http://www.uniprot.org/citations/19389702" target=" blank">19389702</a>). Activated by L-lactate in glomus cells (By similarity).

### **Cellular Location**

Cell membrane; Multi-pass membrane protein. Early endosome membrane; Multi-pass membrane protein

### **Tissue Location**

Highly expressed in the prostate (PubMed:11707321). Also expressed in spleen, liver, olfactory epithelium, retinal pigment epithelium and medulla oblongata (PubMed:11707321, PubMed:16491480, PubMed:29249973). In the retinal pigment epithelium expression is restricted to the pigment cells and choroid (at protein level) (PubMed:29249973). Expressed in epidermal melanocytes (at protein level) (PubMed:27226631).



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# **PSGR Polyclonal Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

**PSGR Polyclonal Antibody - Images**