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PSGR Rabbit pAb

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Catalog # AP54720

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q9H255
Predicted	Rat, Human, Mouse, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	35493
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human PSGR
Epitope Specificity	151-250/320
Isotype	IgG
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.
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]

Additional Information

Gene ID	81285
Other Names	Olfactory receptor 51E2, HPRAJ, Olfactory receptor OR11-16, Prostate-specific G-protein coupled receptor, OR51E2 (HGNC:15195)
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °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 °C.

Protein Information

Name	OR51E2 {ECO:0000303|PubMed:36922591, ECO:0000312|HGNC:HGNC:15195}
Function	Olfactory receptor activated by short-chain fatty acids (SCFA), such as acetate and propionate (propanoate), and beta-ionone, a synthetic terpenoid odorant (PubMed:19389702, PubMed:27226631, PubMed:29249973, PubMed:36922591). Ligand-binding causes a conformation change that triggers signaling via G(s)-class of G alpha protein GNAL/G(olf), mediating activation of adenylate cyclase activity and increased production of cAMP, initiating a neuronal response that triggers the perception of a smell (PubMed:36922591). Beyond its role in olfaction, may also be activated by steroid hormones and regulate cell proliferation (PubMed:19389702). Stimulation of OR51E2 by beta- ionone affects melanocyte proliferation, differentiation, and melanogenesis (PubMed:27226631). Activation of OR51E2 by beta-ionone increases proliferation and migration of primary retinal pigment epithelial (RPE) cells (PubMed:29249973). In response to SCFA, may positively regulate renin secretion and increase blood pressure (PubMed:23401498). 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).

Background

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Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.