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OR1A1 Rabbit pAb

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Catalog # AP57607

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q9P1Q5
Predicted	Rat, Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	34565
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human OR1A1
Epitope Specificity	1-100/309
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	8383
Other Names	Olfactory receptor 1A1, Olfactory receptor 17-7, OR17-7, Olfactory receptor OR17-11, OR1A1
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	OR1A1 {ECO:0000303|PubMed:29632183, ECO:0000312|HGNC:HGNC:8179}
Function	Olfactory receptor activated by various compounds, such as 3-methyl-2,4-nonanedione, dihydrojasmone, citronellol and carvone (PubMed:17601748, PubMed:27642093, PubMed:27916747, PubMed:28656349, PubMed:35686936). 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:27916747). Acts as a selective receptor for 3-methyl-2,4-nonanedione, a key food odorant associated with a prune note in oxidized wine and is an aroma determinant in tea and apricots (PubMed:27916747). Also responds specifically to certain nitromusks, notably musk ambrette, and to a lesser extent, musk tibetene and musk xylene (PubMed:29632183).
Cellular Location	Cell membrane; Multi-pass membrane protein
Tissue Location	Expressed in the olfactory epithelium.

Background

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