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OR2AT4 Antibody (C-term) Blocking peptide

Synthetic peptide
Catalog # BP11920b

Specification

OR2AT4 Antibody (C-term) Blocking peptide - Product Information

Primary Accession A6NND4

OR2AT4 Antibody (C-term) Blocking peptide - Additional Information

Gene ID 341152

Other Names
Olfactory receptor 2AT4, Olfactory receptor OR11-265, OR2AT4

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

OR2AT4 Antibody (C-term) Blocking peptide - Protein Information

Name OR2AT4 {ECO:0000303|PubMed:24999593, ECO:0000312|HGNC:HGNC:19620}

Function
Olfactory receptor (PubMed:24999593, PubMed:30228264). Activated by the synthetic sandalwood odorant sandalore (PubMed:<a href="http:/

OR2AT4 Antibody (C-term) Blocking peptide - Background

Olfactory receptors interact with odorant molecules in thenose, to initiate a neuronal response that triggers the perceptionof a smell. The olfactory receptor proteins are members of a largefamily of G-protein-coupled receptors (GPCR) arising from singlecoding-exon genes. Olfactory receptors share a 7-transmembranedomain structure with many neurotransmitter and hormone receptorsand are responsible for the recognition and G protein-mediatedtransduction of odorant signals. The olfactory receptor gene familyis the largest in the genome. The nomenclature assigned to theolfactory receptor genes and proteins for this organism isindependent of other organisms.

OR2AT4 Antibody (C-term) Blocking peptide - References

Malnic, B., et al. Proc. Natl. Acad. Sci. U.S.A. 101(8):2584-2589(2004)

/www.uniprot.org/citations/24999593" target="_blank">24999593, PubMed:30228264). Endogenous ligand is unknown (Probable). The activity of this receptor is propably mediated by G proteins which induce elevation of intracellular Ca(2+), a cAMP-dependent pathway and phosphorylation of MAPK1/ERK2, MAPK3/ERK1 and p38 MAPKs (PubMed:24999593, PubMed:30228264). Activation of OR2AT4 induces proliferation, migration, and re-epithelialization during wound-healing processes of keratinocytes (PubMed:24999593). Stimulation of OR2AT4 by sandalore promotes hair growth by decreasing apoptosis and increasing production of the anagen-prolonging growth factor IGF1 as well as other pathways involving various kinases (PubMed:30228264).

Cellular Location
Cell membrane; Multi-pass membrane protein

Tissue Location
Detected in the keratinocytes of the epidermis (at protein level) (PubMed:24999593). Detected in hair follicles in proximal outer root sheath and hair matrix keratinocytes (at protein level) (PubMed:30228264).

OR2AT4 Antibody (C-term) Blocking peptide - Protocols

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

- Blocking Peptides