

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 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.

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](http://www.uniprot.org/citations/24999593)
target="_blank">24999593,
PubMed:<a href="http://www.uniprot.org/citations/30228264"
target="_blank">30228264).
Endogenous ligand is unknown (Probable).
The activity of this receptor is probably
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:<a href="http://www.uniprot.org/citations/24999593"
target="_blank">24999593,
PubMed:<a href="http://www.uniprot.org/citations/30228264"
target="_blank">30228264).
Activation of OR2AT4 induces proliferation,
migration, and re-epithelialization during
wound-healing processes of keratinocytes
(PubMed:<a href="http://www.uniprot.org/citations/24999593"
target="_blank">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:<a href="http://www.uniprot.org/citations/30228264"
target="_blank">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](#)