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OR2AT4 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11920b

Specification

OR2AT4 Antibody (C-term) - Product Information

Application	**WB,E**
Primary Accession	A6NND4
Other Accession	NP_001005285.1
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**35503**
Antigen Region	**275-303**

OR2AT4 Antibody (C-term) - Additional Information

Gene ID 341152

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

Target/Specificity
This OR2AT4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 275-303 amino acids from the C-terminal region of human OR2AT4.

Dilution
WB~~1:1000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
OR2AT4 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

OR2AT4 Antibody (C-term) - 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:24999593, PubMed: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: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

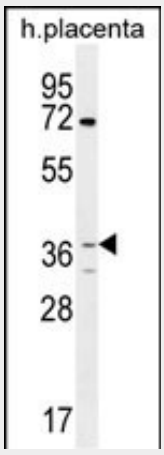
Tissue Location
Detected in the keratinocytes of the epidermis (at protein level) (PubMed:24999593). Detected in hair follicles in proximal outer root sheath and hair matrix keratinocytes (at protein level) (PubMed:30228264).

OR2AT4 Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

OR2AT4 Antibody (C-term) - Images



OR2AT4 Antibody (C-term) (Cat. #AP11920b) western blot analysis in human placenta tissue lysates (35ug/lane).This demonstrates the OR2AT4 antibody detected the OR2AT4 protein (arrow).

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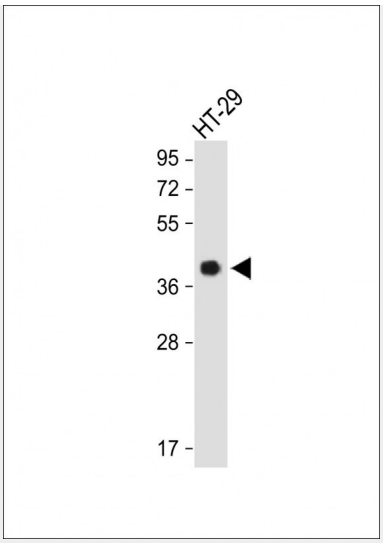

Anti-OR2AT4 Antibody (C-term) at 1:1000 dilution + HT-29 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 36 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

OR2AT4 Antibody (C-term) - 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) - References

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