

# OR51E2 Antibody - C-terminal region

Rabbit Polyclonal Antibody Catalog # AI15234

#### **Product Information**

Application WB
Primary Accession Q9H255

Other Accession <u>NM 030774, NP 110401</u>

**Reactivity Predicted**Human, Rat, Rabbit, Dog, Horse
Human, Rat, Rabbit, Dog, Horse

Host Rabbit
Clonality Polyclonal
Calculated MW 35493

#### **Additional Information**

**Gene ID** 81285

Alias Symbol OR51E3P, OR52A2, PSGR

Other Names Olfactory receptor 51E2, HPRAJ, Olfactory receptor OR11-16, Prostate-specific

G-protein coupled receptor, OR51E2, PSGR

Format Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium

azide and 2% sucrose.

**Reconstitution & Storage** Add 50 ul of distilled water. Final anti-OR51E2 antibody concentration is 1

mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at

20°C. Avoid repeat freeze-thaw cycles.

**Precautions** OR51E2 Antibody - C-terminal region is for research use only and not for use

in diagnostic or therapeutic procedures.

#### **Protein Information**

Name OR51E2 ( <u>HGNC:15195</u>)

**Function** Olfactory receptor (PubMed: <u>27226631</u>, PubMed:<u>29249973</u>). Activated by the

odorant, beta-ionone, a synthetic terpenoid (PubMed:19389702, PubMed:27226631, PubMed:29249973). The activity of this receptor is probably mediated by G-proteins leading to the elevation of intracellular Ca(2+), cAMP and activation of the protein kinases PKA and MAPK3/MAPK1

(PubMed:<u>27226631</u>, PubMed:<u>29249973</u>). Stimulation of OR51E2 by beta-ionone affects melanocyte proliferation, differentiation, and

melanogenesis (PubMed:<u>27226631</u>). Activation of OR51E2 by beta-ionone increases proliferation and migration of primary retinal pigment epithelial (RPE) cells (PubMed:<u>29249973</u>). Activated also by the short-chain fatty acids

(SCFA) acetate and propionate. In response to SCFA, may positively regulate renin secretion and increase blood pressure (PubMed: 23401498). May also be

activated by steroid hormones and regulate cell proliferation

(PubMed: 19389702). 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).

### References

Xu L.L., et al. Cancer Res. 60:6568-6572(2000).

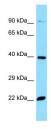
Xia C.,et al.Submitted (APR-2001) to the EMBL/GenBank/DDBJ databases.

Yuan T.T., et al. Gene 278:41-51(2001).

Ota T., et al. Nat. Genet. 36:40-45(2004).

Mural R.J., et al. Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.

## **Images**



WB Suggested Anti-OR51E2 Antibody Titration: 1.0 µg/ml

Positive Control: HepG2 Whole Cell

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