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〈シンポジウム〉

香粧品に心の豊かさを求めて

香りを感じる分子メカニズム

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Molecular Mechanisms Underlying Odorant Perception

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Abstract

The detection of chemicals in the external environment so called "chemosensation" is essential for the survival in many animals. Odorants —volatile 'smellable' chemicals— and pheromones —species and gender specific chemicals— are two major olfactory cues by which information about food and suitable mating partners is transmitted. Olfactory receptors (ORs), which comprise the largest G protein coupled receptor family, play a pivotal role in recognizing a variety of odorants and pheromones in the olfactory system.

Activation of ORs by an odorant results in formation of a receptor code for the odorant at the level of the peripheral olfactory neurons, and leads to formation of odor representation in the brain.

Key words: odorant, olfactory receptor, olfactory neurons, pheromone.