Bollettino della Società Italiana di Biologia Sperimentale

## Supplementary Materials

## Equivalence of order of odour presentation for OCT test



Figure S1 - Percentage of wrong and right responses to the 1-octanol (OCT) test, for different presentation orders. The absolute numbers of wrong/right counts were 44/50 for OCT as first test (left panel) and 56/48 for OCT as second test (right panel), respectively. The line at $50 \%$ represents chance level. The effect of the presentation order is not significant, neither are the proportion of correct choices different from chance level within each test group (probed via binomial tests).

## Effect of reference odorant in BZA tests



Figure S2 - The use of different reference isotopomers, either hydrogenated (h) or deuterated $\left(d_{5}\right)$ benzaldehyde was not affecting the percentage of correct answers. The absolute numbers of wrong/right counts were $49 / 52$ for the BZA-d reference (left panel) and 41/56 for the BZA-h reference (right panel), respectively. The effect of the reference is statistically nonsignificant, neither is the deviation from chance level for each reference, probed via binomial tests.

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## Effect of reference odorant in OCT tests



Figure S3 - The use of different reference isotopomers, either hydrogenated (h) or deuterated $\left(d_{17}\right)$ 1-octanol was not affecting the percentage of correct answers. The absolute numbers of wrong/right counts were $49 / 49$ for the OCT-d reference (left panel) and 51/49 for the OCT-h reference (right panel), respectively. The effect of the reference is statistically nonsignificant, neither is the deviation from chance level for each reference, probed via binomial tests.

## Effect of sex in BZA tests



Figure S4 - The gender of the participants was not affecting the percentage of correct answers to the benzaldehyde test. The absolute numbers of wrong/right counts were 49/58 in females (left panel) and $41 / 50$ males (right panel), respectively. Within each gender, the proportion of correct choices probed via a binomial test is not different from chance level.

## Effect of sex in OCT tests



Figure S5 - The gender of the participants was not affecting the percentage of correct answers to the 1 -octanol test. The absolute numbers of wrong/right counts were $56 / 51$ in females (left panel) and 44/47 in males (right panel), respectively. Within each gender, the proportion of correct choices probed via a binomial test is not different from chance level.

## Age of participants.



Figure S6 - Distribution of ages of participants recruited for the experiment.

## Effect of age in BZA tests



Figure S7 - The age of the participants was not affecting the percentage of correct answers to the benzaldehyde test. The absolute numbers of wrong/right counts were $43 / 48$ in the $<=21$ years group (left panel) and $47 / 60$ in the $>21$ years group (right panel), respectively. Within each age group, the proportion of correct choices probed via a binomial test is not different from chance level.

## Effect of age in OCT tests



Figure S8 - The age of the participants was not affecting the percentage of correct answers to the 1 -octanol test. The absolute numbers of wrong/right counts were $46 / 45$ in $<=21$ years group (left panel) and $54 / 53$ in the $>21$ years group (right panel), respectively. Within each age group, the proportion of correct choices probed via a binomial test is not different from chance level.

