1	Chemosensory event-related potentials in response to nasal
2	propylene glycol stimulation
3	
4	Mohammad Sirous <sup>1*</sup> , Nico Sinning <sup>1*</sup> , Till R. Schneider <sup>1</sup> , Uwe Friese <sup>1,3</sup> , Jürgen
5	Lorenz <sup>2</sup> , Andreas K. Engel <sup>1</sup>
6	
7	
8	<sup>1</sup> Department of Neurophysiology and Pathophysiology, University Medical Center
9	Hamburg-Eppendorf, 20246 Hamburg, Germany
10	
11	<sup>2</sup> Faculty of Life Science, Laboratory of Human Biology and Physiology, Applied
12	Science University, 21033 Hamburg, Germany
13	
14 15 16	<sup>3</sup> Faculty of Life Sciences, MSH Medical School Hamburg, 20457 Hamburg, Germany
17	
18	* Both authors contributed equally to this manuscript
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	Correspondence should be addressed to:
30	Dr. Mohammad Sirous
31	Dept. of Neurophysiology and Pathophysiology
32	University Medical Center Hamburg-Eppendorf
33	20246 Hamburg
34	Dr.mohammadsirous@gmail.com



Supplementary Figure 1: Baseline corrected (-500 – 0 ms) evoked potentials. The x-axis shows the time in ms and the y-axis displays the power in  $\mu$  V.

Top: CSERPs of all conditions at electrode Cz. Bottom: CSERPs of the conditions containing propylene glycol after subtraction of the control condition (electrode Cz). The ERPs in the top panel include a visual evoked potential during the stimulus onset, which was produced by the stimulus cue. Subtraction of the control condition reveals the pure response to the chemosensory stimulus (bottom panel).



**Supplementary Figure 2:** Grandaverage CSERPs at all electrodes (baseline corrected (-500 – 0ms)). The x-axis shows the time in ms and the y-axis displays the power in  $\mu$  V. All conditions containing propylene glycol are plotted after subtraction of the control condition.



**Supplementary Figure 3:** Topography of EEG responses at N1 (240ms) and P2 (450ms) in  $\mu$ V for all conditions.



**Supplementary Figure 4:** Source analysis of the visual evoked potential (125 ms after colour change, see supplementary figure 1) in the control condition by means of eLORETA. The analysis reveals occipital activation. The visual response seems to be related to the colour change of the circle before chemosensory stimulus onset, which slightly changed the luminance.