

Table SII. *t*-values of the scratch-related activations in the regions of interests (ROI) used for the analysis. The higher the value the stronger was the activation during the scratch bouts. Negative values indicate a decrease in the blood-oxygen-level dependent signal during the scratch bouts

| ROI | Capsaicin | | Histamine | |
|--------------------------|--------------|--------------|--------------|--------------|
| | Placebo | Naltrexone | Placebo | Naltrexone |
| Left hemisphere | | | | |
| Thalamus | 7.53 | 6.34 | 7.15 | 4.87 |
| Caudatus | 1.95 | 2.36 | 3.25 | 1.41 |
| Amygdala | -5.03 | -1.03 | -3.82 | -3.28 |
| Hippocampus | -4.15 | -1.25 | -2.92 | -1.96 |
| sACC | -2.72 | -1.36 | -1.33 | -2.78 |
| pACC | 6.70 | 4.02 | 9.35 | 3.50 |
| MCC | 9.53 | 7.65 | 10.23 | 8.48 |
| Frontal medial BA10 | 0.49 | -1.07 | 0.51 | 0.16 |
| Anterior insular cortex | 9.19 | 8.95 | 9.52 | 8.64 |
| Posterior insular cortex | 12.27 | 13.52 | 12.21 | 11.94 |
| Operculum | 13.48 | 15.38 | 12.98 | 14.70 |
| S1 | 10.89 | 13.63 | 10.79 | 14.57 |
| BA40 | 10.47 | 12.31 | 11.56 | 14.47 |
| M1 BA4 | -6.24 | -5.91 | -6.92 | -4.96 |
| Right hemisphere | | | | |
| Thalamus | 9.18 | 6.56 | 8.83 | 6.24 |
| Caudatus | 2.74 | 2.18 | 4.01 | 1.63 |
| Putamen | 4.86 | 3.56 | 4.91 | 3.66 |
| Amygdala | -5.70 | -2.21 | -3.30 | -2.44 |
| Hippocampus | -7.91 | -6.98 | -7.00 | -6.42 |
| sACC | -4.03 | -2.12 | -0.97 | -0.54 |
| pACC | 7.41 | 3.43 | 8.96 | 3.27 |
| MCC | 10.58 | 7.86 | 10.97 | 7.84 |
| Frontal medial BA9 | 1.06 | 2.04 | 2.35 | 0.56 |
| Frontal medial BA10 | 1.06 | 1.54 | 0.65 | -0.75 |
| Frontal lateral BA46 | 2.57 | 2.61 | 4.58 | 1.40 |
| Anterior insular cortex | 9.88 | 8.70 | 11.13 | 9.60 |
| Posterior insular cortex | 14.41 | 13.28 | 15.01 | 11.84 |
| Operculum | 13.80 | 13.40 | 14.45 | 12.83 |
| S1 | 9.61 | 12.08 | 9.25 | 12.00 |
| BA40 | 10.26 | 9.70 | 9.90 | 11.27 |

Significant *t*-values ($p < 0.001$) are given in bold.

sACC: subgenual anterior cingulate cortex. pACC: pregenual anterior cingulate cortex. MCC: midcingulate cortex. S1: primary somatosensory cortex. M1: primary motor cortex; BA: Brodman area.