**Supplementary Table 1.** Pressure Pain Activation

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Region** | **BA** | **Side** | **Co-ordinates** | | | **Z stat** |
|  |  |  | x | y | z |  |
| Mid Cingulate Cortex | 24 | R | 4 | -8 | 38 | 4.84 |
|  | 32 | R | 8 | 14 | 44 | 4.88 |
| Superior Frontal Gyrus | 8 | R | 2 | 30 | 48 | 3.92 |
| Middle Frontal Gyrus | 46 | R | 42 | 34 | 26 | 4.75 |
|  | 10 | L | -44 | 46 | 16 | 5.15 |
|  | 46 | R | 46 | 40 | 12 | 4.97 |
|  | 46 | R | 44 | 50 | 2 | 5.20 |
| Post Central Gyrus | 3 | R | 62 | -28 | 34 | 5.83 |
|  | 3 | L | -64 | -26 | 32 | 5.20 |
| Secondary Somatosensory Cortex |  | R | 52 | -22 | 16 | 6.10 |
|  |  | L | -60 | -30 | 22 | 5.86 |
| Pre Central Gyrus | 4 | R | 50 | -14 | 44 | 5.12 |
| Pre Motor Cortex | 6 | R | 50 | 0 | 44 | 4.24 |
| Supplementary Motor Cortex | 6 | R | 8 | 2 | 58 | 4.67 |
| Inferior Parietal Lobule | 40 | R | 64 | -44 | 34 | 7.28 |
|  | 40 | R | 60 | -36 | 26 | 6.06 |
|  | 40 | L | -62 | -36 | 30 | 5.40 |
| Insula |  |  |  |  |  |  |
| Anterior | 13 | R | 38 | 12 | 6 | 6.34 |
|  | 13 | L | -32 | 18 | 6 | 5.76 |
| Mid | 13 | R | 42 | -2 | 12 | 6.82 |
|  | 13 | L | -36 | -2 | 14 | 5.80 |
| Posterior | 13 | R | 38 | -16 | 14 | 4.09 |
| Thalamus |  | R | 18 | -14 | 12 | 4.06 |
|  |  | R | 16 | -8 | 8 | 5.38 |
|  |  | L | -14 | -4 | 10 | 4.06 |
| Putamen |  | R | 22 | 6 | 4 | 5.07 |
| Cerebellum |  |  |  |  |  |  |
| Declive |  | R | 20 | -60 | -36 | 4.18 |
|  |  | L | -22 | -58 | -38 | 3.94 |
| Pyramis |  | R | 16 | -78 | -46 | 5.09 |
|  |  | L | -22 | -74 | -42 | 5.69 |

Coordinates of peak z stats are according to the template brain of the Montreal Neurological Institute. Voxel inclusion threshold of z > 2.3 and cluster corrected threshold (pcorr<0.05) for all activations. BA, Brodmann Area

**Supplementary Table 2.** Cold Pain Activations

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Region** | **BA** | **Side** | **Co-ordinates** | | | **Z stat** |
|  |  |  | x | y | z |  |
| Posterior Cingulate Cortex | 23 | L | -2 | -26 | 30 | 4.22 |
| Middle Frontal Gyrus | 46 | R | 36 | 34 | 14 | 4.67 |
|  | 46 | L | -34 | 34 | 10 | 4.53 |
| Orbitofrontal Gyrus | 10 | R | 26 | 54 | -12 | 4.63 |
|  | 10 | L | -36 | 50 | -16 | 3.98 |
| Pre Motor Cortex | 6 | R | 62 | 12 | 20 | 4.16 |
| Supplementary Motor Area | 6 | R | 12 | 10 | 62 | 4.17 |
| Secondary Somatosensory Cortex |  | R | 64 | -24 | 24 | 4.55 |
|  |  | L | -56 | -24 | 24 | 4.16 |
| Inferior Parietal Lobule | 40 | R | 50 | -50 | 50 | 7.61 |
|  | 40 | L | -50 | -44 | 48 | 4.36 |
|  | 40 | R | 54 | -46 | 38 | 6.32 |
|  | 40 | L | -50 | -40 | 36 | 4.65 |
| Insula |  |  |  |  |  |  |
| Anterior | 13 | R | 34 | 20 | 6 | 5.46 |
| Mid | 13 | R | 38 | 12 | 0 | 5.89 |
|  | 13 | L | -36 | 12 | 0 | 5.34 |
| Posterior | 13 | R | 42 | -24 | 18 | 3.94 |
| Thalamus |  | R | 12 | -6 | 12 | 4.56 |
|  |  | R | 8 | -20 | 6 | 3.32 |
| Caudate |  | R | 16 | 6 | 18 | 3.77 |
| Putamen |  | R | 20 | 2 | 12 | 3.17 |
| Cerebellum |  |  |  |  |  |  |
| Declive |  | L | -28 | -66 | -28 | 5.79 |
| Pyramis |  | L | -34 | -72 | -48 | 3.71 |

Coordinates of peak z stats are according to the template brain of the Montreal Neurological Institute. Voxel inclusion threshold of z > 2.3 and cluster corrected threshold (pcorr<0.05) for all activations. BA, Brodmann Area