**Supplementary Table 1. Region of interest**

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| --- | --- | --- | --- | --- | --- |
| **Lobe** | **gyrus** | **Abbreviation** | **label** | | **anatomical description** |
| **Frontal Lobe** | SFG, Superior Frontal Gyrus | SFG\_R\_7\_1 / SFG\_L\_7\_1 | 1 | 273 | A8m, medial area 8 |
| SFG\_R\_7\_2 / SFG\_L\_7\_2 | 2 | 272 | A8dl, dorsolateral area 8 |
| SFG\_R\_7\_3 / SFG\_L\_7\_3 | 3 | 271 | A9l, lateral area 9 |
| SFG\_R\_7\_4 / SFG\_L\_7\_4 | 4 | 270 | A6dl, dorsolateral area 6 |
| SFG\_R\_7\_5 / SFG\_L\_7\_5 | 5 | 269 | A6m, medial area 6 |
| SFG\_R\_7\_6 / SFG\_L\_7\_6 | 6 | 268 | A9m,medial area 9 |
| SFG\_R\_7\_7 / SFG\_L\_7\_7 | 7 | 267 | A10m, medial area 10 |
| MFG, Middle Frontal Gyrus | MFG\_R\_7\_1 / MFG\_L\_7\_1 | 8 | 266 | A9/46d, dorsal area 9/46 |
| MFG\_R\_7\_2 / MFG\_L\_7\_2 | 9 | 265 | IFJ, inferior frontal junction |
| MFG\_R\_7\_3 / MFG\_L\_7\_3 | 10 | 264 | A46, area 46 |
| MFG\_R\_7\_4 / MFG\_L\_7\_4 | 11 | 263 | A9/46v, ventral area 9/46 |
| MFG\_R\_7\_5 / MFG\_L\_7\_5 | 12 | 262 | A8vl, ventrolateral area 8 |
| MFG\_R\_7\_6 / MFG\_L\_7\_6 | 13 | 261 | A6vl, ventrolateral area 6 |
| MFG\_R\_7\_7 / MFG\_L\_7\_7 | 14 | 260 | A10l, lateral area10 |
| IFG, Inferior Frontal Gyrus | IFG\_R\_6\_1 / IFG\_L\_6\_1 | 15 | 259 | A44d,dorsal area 44 |
| IFG\_R\_6\_2 / IFG\_L\_6\_2 | 16 | 258 | IFS, inferior frontal sulcus |
| IFG\_R\_6\_3 / IFG\_L\_6\_3 | 17 | 257 | A45c, caudal area 45 |
| IFG\_R\_6\_4 / IFG\_L\_6\_4 | 18 | 256 | A45r, rostral area 45 |
| IFG\_R\_6\_5 / IFG\_L\_6\_5 | 19 | 255 | A44op, opercular area 44 |
| IFG\_R\_6\_6 / IFG\_L\_6\_6 | 20 | 254 | A44v, ventral area 44 |
| OrG, Orbital Gyrus | OrG\_R\_6\_1 / OrG\_L\_6\_1 | 21 | 253 | A14m, medial area 14 |
| OrG\_R\_6\_2 / OrG\_L\_6\_2 | 22 | 252 | A12/47o, orbital area 12/47 |
| OrG\_R\_6\_3 / OrG\_L\_6\_3 | 23 | 251 | A11l, lateral area 11 |
| OrG\_R\_6\_4 / OrG\_L\_6\_4 | 24 | 250 | A11m, medial area 11 |
| OrG\_R\_6\_5 / OrG\_L\_6\_5 | 25 | 249 | A13, area 13 |
| OrG\_R\_6\_6 / OrG\_L\_6\_6 | 26 | 248 | A12/47l, lateral area 12/47 |
| PrG, Precentral Gyrus | PrG\_R\_6\_1 / PrG\_L\_6\_1 | 27 | 247 | A4hf, area 4(head and face region) |
| PrG\_R\_6\_2 / PrG\_L\_6\_2 | 28 | 246 | A6cdl, caudal dorsolateral area 6 |
| PrG\_R\_6\_3 / PrG\_L\_6\_3 | 29 | 245 | A4ul, area 4(upper limb region) |
| PrG\_R\_6\_4 / PrG\_L\_6\_4 | 30 | 244 | A4t, area 4(trunk region) |
| PrG\_R\_6\_5 / PrG\_L\_6\_5 | 31 | 243 | A4tl, area 4(tongue and larynx region) |
| PrG\_R\_6\_6 / PrG\_L\_6\_6 | 32 | 242 | A6cvl, caudal ventrolateral area 6 |
| PCL, Paracentral Lobule | PCL\_R\_2\_1 / PCL\_L\_2\_1 | 33 | 241 | A1/2/3ll, area1/2/3 (lower limb region) |
| PCL\_R\_2\_2 / PCL\_L\_2\_2 | 34 | 240 | A4ll, area 4, (lower limb region) |
| **Temporal Lobe** | STG, Superior Temporal Gyrus | STG\_R\_6\_1 / STG\_L\_6\_1 | 35 | 239 | A38m, medial area 38 |
| STG\_R\_6\_2 / STG\_L\_6\_2 | 36 | 238 | A41/42, area 41/42 |
| STG\_R\_6\_3 / STG\_L\_6\_3 | 37 | 237 | TE1.0 and TE1.2 |
| STG\_R\_6\_4 / STG\_L\_6\_4 | 38 | 236 | A22c, caudal area 22 |
| STG\_R\_6\_5 / STG\_L\_6\_5 | 39 | 235 | A38l, lateral area 38 |
| STG\_R\_6\_6 / STG\_L\_6\_6 | 40 | 234 | A22r, rostral area 22 |
| MTG, Middle Temporal Gyrus | MTG\_R\_4\_1 / MTG\_L\_4\_1 | 41 | 233 | A21c, caudal area 21 |
| MTG\_R\_4\_2 / MTG\_L\_4\_2 | 42 | 232 | A21r, rostral area 21 |
| MTG\_R\_4\_3 / MTG\_L\_4\_3 | 43 | 231 | A37dl, dorsolateral area37 |
| MTG\_R\_4\_4 / MTG\_L\_4\_4 | 44 | 230 | aSTS, anterior superior temporal sulcus |
| ITG, Inferior Temporal Gyrus | ITG\_R\_7\_1 / ITG\_L\_7\_1 | 45 | 229 | A20iv, intermediate ventral area 20 |
| ITG\_R\_7\_2 / ITG\_L\_7\_2 | 46 | 228 | A37elv, extreme lateroventral area37 |
| ITG\_R\_7\_3 / ITG\_L\_7\_3 | 47 | 227 | A20r, rostral area 20 |
| ITG\_R\_7\_4 / ITG\_L\_7\_4 | 48 | 226 | A20il, intermediate lateral area 20 |
| ITG\_R\_7\_5 / ITG\_L\_7\_5 | 49 | 225 | A37vl, ventrolateral area 37 |
| ITG\_R\_7\_6 / ITG\_L\_7\_6 | 50 | 224 | A20cl, caudolateral of area 20 |
| ITG\_R\_7\_7 / ITG\_L\_7\_7 | 51 | 223 | A20cv, caudoventral of area 20 |
| FuG, Fusiform Gyrus | FuG\_R\_3\_1 / FuG\_L\_3\_1 | 52 | 222 | A20rv, rostroventral area 20 |
| FuG\_R\_3\_2 / FuG\_L\_3\_2 | 53 | 221 | A37mv, medioventral area37 |
| FuG\_R\_3\_3 / FuG\_L\_3\_3 | 54 | 220 | A37lv, lateroventral area37 |
| PhG, Parahippocampal Gyrus | PhG\_R\_6\_1 / PhG\_L\_6\_1 | 55 | 219 | A35/36r, rostral area 35/36 |
| PhG\_R\_6\_2 / PhG\_L\_6\_2 | 56 | 218 | A35/36c, caudal area 35/36 |
| PhG\_R\_6\_3 / PhG\_L\_6\_3 | 57 | 217 | TL, area TL (lateral PPHC, posterior parahippocampal gyrus) |
| PhG\_R\_6\_4 / PhG\_L\_6\_4 | 58 | 216 | A28/34, area 28/34 (EC, entorhinal cortex) |
| PhG\_R\_6\_5 / PhG\_L\_6\_5 | 59 | 215 | TI, area TI(temporal agranular insular cortex) |
| PhG\_R\_6\_6 / PhG\_L\_6\_6 | 60 | 214 | TH, area TH (medial PPHC) |
| pSTS, posterior Superior Temporal Sulcus | pSTS\_R\_2\_1 / pSTS\_L\_2\_1 | 61 | 213 | rpSTS, rostroposterior superior temporal sulcus |
| pSTS\_R\_2\_2 / pSTS\_L\_2\_2 | 62 | 212 | cpSTS, caudoposterior superior temporal sulcus |
| **Parietal Lobe** | SPL, Superior Parietal Lobule | SPL\_R\_5\_1 / SPL\_L\_5\_1 | 63 | 211 | A7r, rostral area 7 |
| SPL\_R\_5\_2 / SPL\_L\_5\_2 | 64 | 210 | A7c, caudal area 7 |
| SPL\_R\_5\_3 / SPL\_L\_5\_3 | 65 | 209 | A5l, lateral area 5 |
| SPL\_R\_5\_4 / SPL\_L\_5\_4 | 66 | 208 | A7pc, postcentral area 7 |
| SPL\_R\_5\_5 / SPL\_L\_5\_5 | 67 | 207 | A7ip, intraparietal area 7(hIP3) |
| IPL, Inferior Parietal Lobule | IPL\_R\_6\_1 / IPL\_L\_6\_1 | 68 | 206 | A39c, caudal area 39(PGp) |
| IPL\_R\_6\_2 / IPL\_L\_6\_2 | 69 | 205 | A39rd, rostrodorsal area 39(Hip3) |
| IPL\_R\_6\_3 / IPL\_L\_6\_3 | 70 | 204 | A40rd, rostrodorsal area 40(PFt) |
| IPL\_R\_6\_4 / IPL\_L\_6\_4 | 71 | 203 | A40c, caudal area 40(PFm) |
| IPL\_R\_6\_5 / IPL\_L\_6\_5 | 72 | 202 | A39rv, rostroventral area 39(PGa) |
| IPL\_R\_6\_6 / IPL\_L\_6\_6 | 73 | 201 | A40rv, rostroventral area 40(PFop) |
| Pcun, Precuneus | PCun\_R\_4\_1 / PCun\_L\_4\_1 | 74 | 200 | A7m, medial area 7(PEp) |
| PCun\_R\_4\_2 / PCun\_L\_4\_2 | 75 | 199 | A5m, medial area 5(PEm) |
| PCun\_R\_4\_3 / PCun\_L\_4\_3 | 76 | 198 | dmPOS, dorsomedial parietooccipital sulcus(PEr) |
| PCun\_R\_4\_4 / PCun\_L\_4\_4 | 77 | 197 | A31, area 31 (Lc1) |
| PoG, Postcentral Gyrus | PoG\_R\_4\_1 / PoG\_L\_4\_1 | 78 | 196 | A1/2/3ulhf, area 1/2/3(upper limb, head and face region) |
| PoG\_R\_4\_2 / PoG\_L\_4\_2 | 79 | 195 | A1/2/3tonIa, area 1/2/3(tongue and larynx region) |
| PoG\_R\_4\_3 / PoG\_L\_4\_3 | 80 | 194 | A2, area 2 |
| PoG\_R\_4\_4 / PoG\_L\_4\_4 | 81 | 193 | A1/2/3tru, area1/2/3(trunk region) |
| **Insular Lobe** | INS, Insular Gyrus | INS\_R\_6\_1 / INS\_L\_6\_1 | 82 | 192 | G, hypergranular insula |
| INS\_R\_6\_2 / INS\_L\_6\_2 | 83 | 191 | vIa, ventral agranular insula |
| INS\_R\_6\_3 / INS\_L\_6\_3 | 84 | 190 | dIa, dorsal agranular insula |
| INS\_R\_6\_4 / INS\_L\_6\_4 | 85 | 189 | vId/vIg, ventral dysgranular and granular insula |
| INS\_R\_6\_5 / INS\_L\_6\_5 | 86 | 188 | dIg, dorsal granular insula |
| INS\_R\_6\_6 / INS\_L\_6\_6 | 87 | 187 | dId, dorsal dysgranular insula |
| **Limbic Lobe** | CG, Cingulate Gyrus | CG\_R\_7\_1 / CG\_L\_7\_1 | 88 | 186 | A23d, dorsal area 23 |
| CG\_R\_7\_2 / CG\_L\_7\_2 | 89 | 185 | A24rv, rostroventral area 24 |
| CG\_R\_7\_3 / CG\_L\_7\_3 | 90 | 184 | A32p, pregenual area 32 |
| CG\_R\_7\_4 / CG\_L\_7\_4 | 91 | 183 | A23v, ventral area 23 |
| CG\_R\_7\_5 / CG\_L\_7\_5 | 92 | 182 | A24cd, caudodorsal area 24 |
| CG\_R\_7\_6 / CG\_L\_7\_6 | 93 | 181 | A23c, caudal area 23 |
| CG\_R\_7\_7 / CG\_L\_7\_7 | 94 | 180 | A32sg, subgenual area 32 |
| **Occipital Lobe** | MVOcC*,* MedioVentral Occipital Cortex | MVOcC \_R\_5\_1 / MVOcC \_L\_5\_1 | 95 | 179 | cLinG, caudal lingual gyrus |
| MVOcC \_R\_5\_2 / MVOcC \_L\_5\_2 | 96 | 178 | rCunG, rostral cuneus gyrus |
| MVOcC \_R\_5\_3 / MVOcC \_L\_5\_3 | 97 | 177 | cCunG, caudal cuneus gyrus |
| MVOcC \_R\_5\_4 / MVOcC \_L\_5\_4 | 98 | 176 | rLinG, rostral lingual gyrus |
| MVOcC \_R\_5\_5 / MVOcC \_L\_5\_5 | 99 | 175 | vmPOS,ventromedial parietooccipital sulcus |
| LOcC, lateral Occipital Cortex | LOcC\_R\_4\_1 / LOcC\_L\_4\_1 | 100 | 174 | mOccG, middle occipital gyrus |
| LOcC \_R\_4\_2 / LOcC \_L\_4\_2 | 101 | 173 | V5/MT+, area V5/MT+ |
| LOcC \_R\_4\_3 / LOcC \_L\_4\_3 | 102 | 172 | OPC, occipital polar cortex |
| LOcC\_R\_4\_4 / LOcC\_L\_4\_4 | 103 | 171 | iOccG, inferior occipital gyrus |
| LOcC \_R\_2\_1 / LOcC \_L\_2\_1 | 104 | 170 | msOccG, medial superior occipital gyrus |
| LOcC \_R\_2\_2 / LOcC \_L\_2\_2 | 105 | 169 | lsOccG, lateral superior occipital gyrus |
| **Subcortical Nuclei** | Amyg, Amygdala | Amyg\_R\_2\_1 / Amyg\_L\_2\_1 | 106 | 168 | mAmyg, medial amygdala |
| Amyg\_R\_2\_2 / Amyg\_L\_2\_2 | 107 | 167 | lAmyg, lateral amygdala |
| Hipp, Hippocampus | Hipp\_R\_2\_1 / Hipp\_L\_2\_1 | 108 | 166 | rHipp, rostral hippocampus |
| Hipp\_R\_2\_2 / Hipp\_L\_2\_2 | 109 | 165 | cHipp, caudal hippocampus |
| BG, Basal Ganglia | BG\_R\_6\_1 / BG\_L\_6\_1 | 110 | 164 | vCa, ventral caudate |
| BG\_R\_6\_2 / BG\_L\_6\_2 | 111 | 163 | GP, globus pallidus |
| BG\_R\_6\_3 / BG\_L\_6\_3 | 112 | 162 | NAC, nucleus accumbens |
| BG\_R\_6\_4 / BG\_L\_6\_4 | 113 | 161 | vmPu, ventromedial putamen |
| BG\_R\_6\_5 / BG\_L\_6\_5 | 114 | 160 | dCa, dorsal caudate |
| BG\_R\_6\_6 / BG\_L\_6\_6 | 115 | 159 | dlPu, dorsolateral putamen |
| Tha, Thalamus | Tha\_R\_8\_1 / Tha\_L\_8\_1 | 116 | 158 | mPFtha, medial pre-frontal thalamus |
| Tha\_R\_8\_2 / Tha\_L\_8\_2 | 117 | 157 | mPMtha, pre-motor thalamus |
| Tha\_R\_8\_3 / Tha\_L\_8\_3 | 118 | 156 | Stha, sensory thalamus |
| Tha\_R\_8\_4 / Tha\_L\_8\_4 | 119 | 155 | rTtha, rostral temporal thalamus |
| Tha\_R\_8\_5 / Tha\_L\_8\_5 | 120 | 154 | PPtha, posterior parietal thalamus |
| Tha\_R\_8\_6 / Tha\_L\_8\_6 | 121 | 153 | Otha, occipital thalamus |
| Tha\_R\_8\_7 / Tha\_L\_8\_7 | 122 | 152 | cTtha, caudal temporal thalamus |
| Tha\_R\_8\_8 / Tha\_L\_8\_8 | 123 | 151 | lPFtha, lateral pre-frontal thalamus |
| **Cerebellum** |  | CB\_R\_I-IV / CB\_L\_I-IV | 124 | 150 | Cerebellar lobule I-IV |
|  | CB\_R\_V / CB\_L\_V | 125 | 149 | Cerebellar lobule IX |
|  | CB\_R\_VI / CB\_L\_VI | 126 | 148 | Cerebellar lobule VI |
|  | CB\_R\_Crus I / CB\_L\_Crus I | 127 | 147 | Cerebellar Crus I |
|  | CB\_R\_Crus II / CB\_L\_Crus II | 128 | 146 | Cerebellar Crus II |
|  | CB\_R\_VIIb / CB\_L\_VIIb | 129 | 145 | Cerebellar lobule VIIb |
|  | CB\_R\_VIIIa / CB\_L\_VIIIa | 130 | 144 | Cerebellar lobule VIIIa |
|  | CB\_R\_VIIIb / CB\_L\_VIIIb | 131 | 143 | Cerebellar lobule VIIIb |
|  | CB\_R\_IX / CB\_L\_IX | 132 | 142 | Cerebellar lobule IX |
|  | CB\_R\_X / CB\_L\_X | 133 | 141 | Cerebellar lobule X |
|  | Vermis\_VI | 134 | | Cerebellar lobule VI, vermis |
|  | Vermis\_Crus II | 135 | | Cerebellar Crus II, vermis |
|  | Vermis\_VIIb | 136 | | Cerebellar lobule VIIb, vermis |
|  | Vermis\_VIIIa | 137 | | Cerebellar lobule VIIIa, vermis |
|  | Vermin\_VIIIb | 138 | | Cerebellar lobule VIIIb, vermis |
|  | Vermis\_IX | 139 | | Cerebellar lobule IX, vermis |
|  | Vermis\_X | 140 | | Cerebellar lobule X, vermis |
| \* Vermis\_Crus I was excluded in the analysis due to small ROI size. | | |  |  |  |