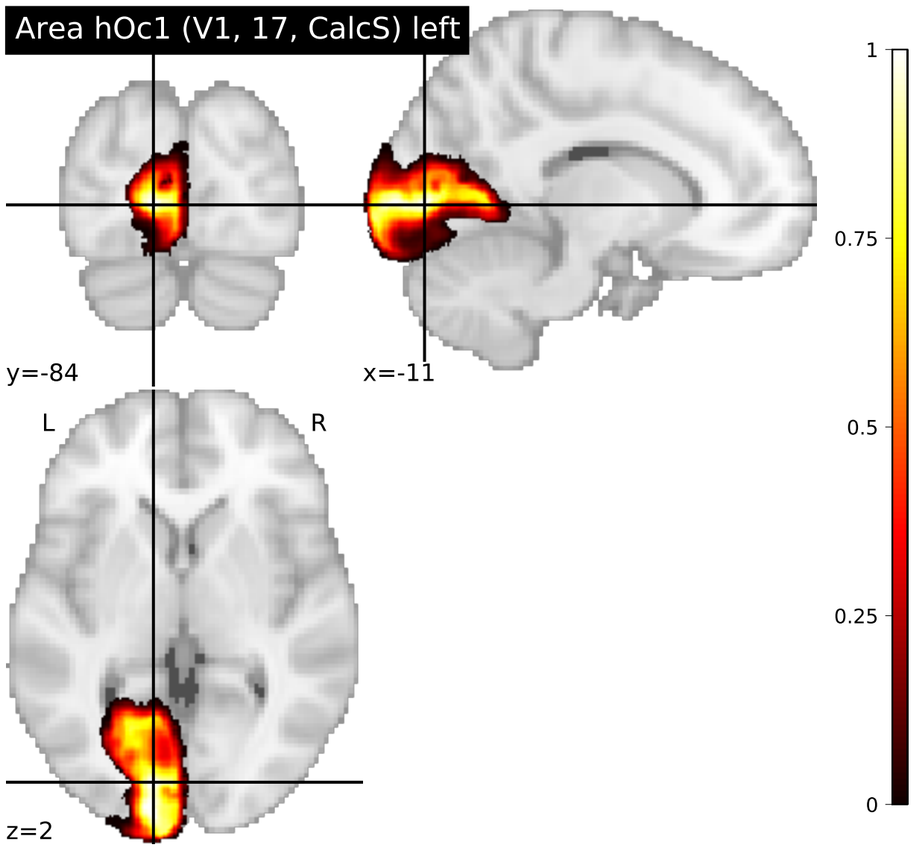
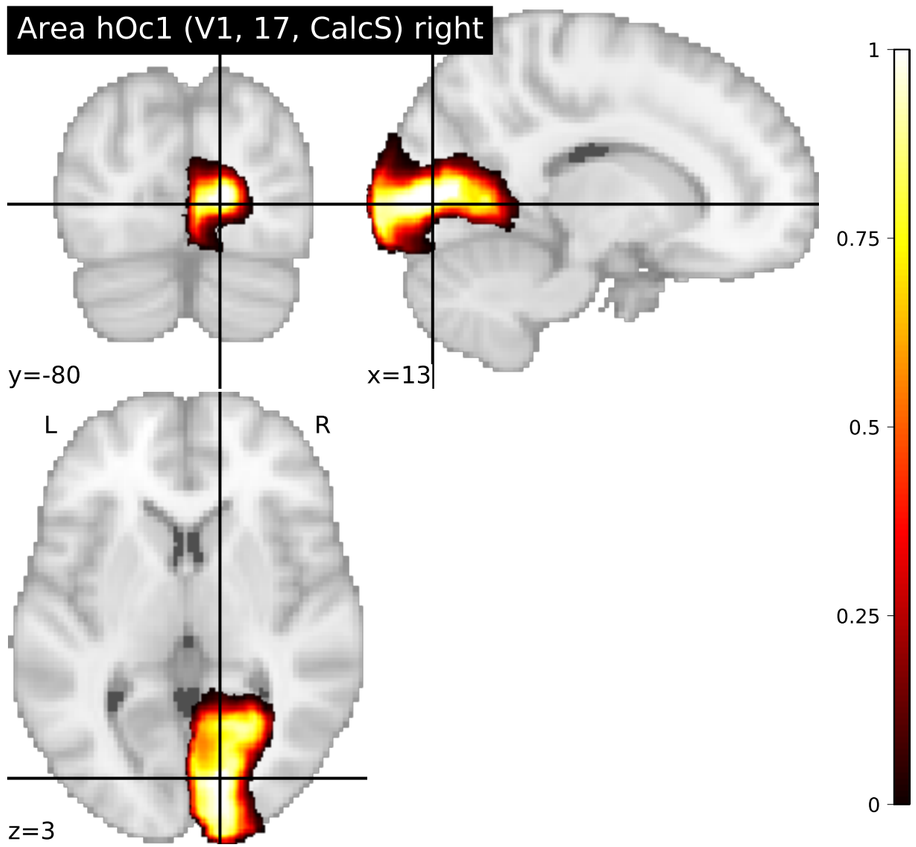
Area hOc1 (V1, 17, CalcS)

Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral cortex
        └── occiptal lobe
            └── occipital cortex

This dataset contains the distinct architectonic Area hOc1 (V1, 17, CalcS) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to Area hOc1 (V1, 17, CalcS). The probability map of Area hOc1 (V1, 17, CalcS) are provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Area hOc1 (V1, 17, CalcS): Amunts et al. (2018) [Data set, v2.2] [DOI: 10.25493/8VRA-X28](https://doi.org/10.25493%2F8VRA-X28) The most probable delineation of Area hOc1 (V1, 17, CalcS) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.13] [DOI: 10.25493/Q3ZS-NV6](https://doi.org/10.25493%2FQ3ZS-NV6) Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D)

Amunts, K., Malikovic, A., Mohlberg, H., Schormann, T., & Zilles, K. (2000). Brodmann's Areas 17 and 18 Brought into Stereotaxic Space—Where and How Variable? NeuroImage, 11(1), 66–84.



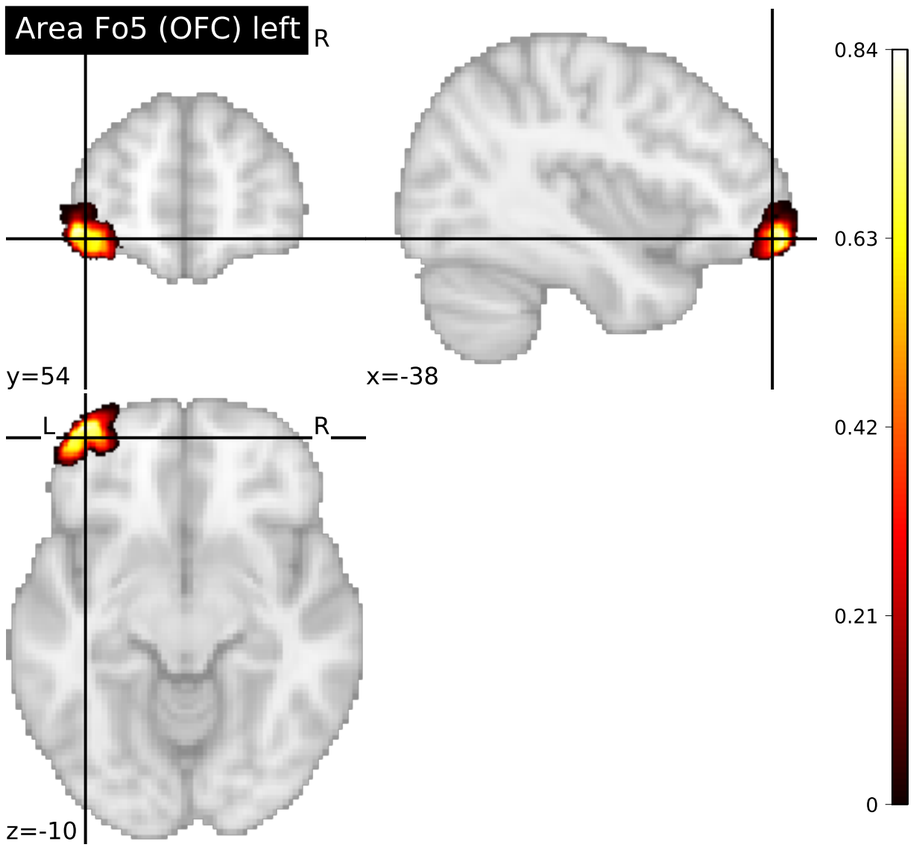


Area Fo5 (OFC)

Julich-Brain Cytoarchitectonic Maps 2.9
- telencephalon
  - cerebral cortex
    - frontal lobe
      - lateral orbitofrontal cortex

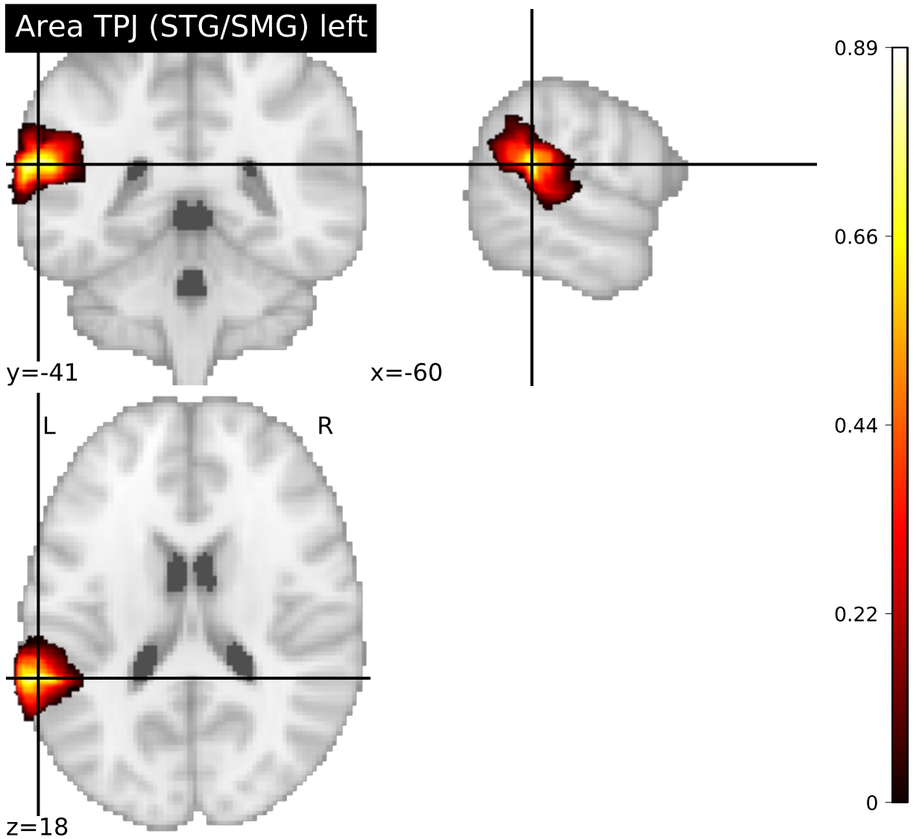
This dataset contains the distinct architectonic Area Fo5 (OFC) in the MNI Colin 27 and MNI ICBM 152 reference spaces. As part of the Julich-Brain atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. Subsequently the results of the cytoarchitectonic analysis are mapped to the MNI Colin 27 and MNI ICBM 152 reference spaces where each voxel is assigned with the probability to belong to Area Fo5 (OFC). The probability map of Area Fo5 (OFC) are provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. The most probable delineation of Area Fo5 (OFC) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D)

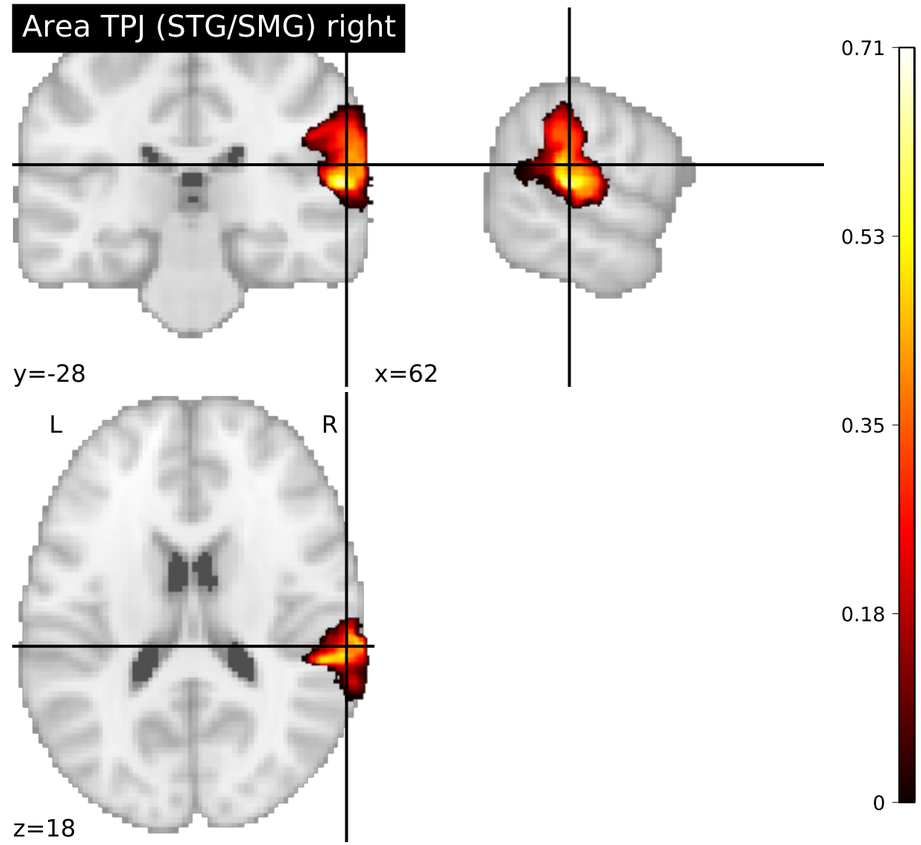
Wojtasik, M., Bludau, S., Eickhoff, S. B., Mohlberg, H., Gerboga, F., Caspers, S., Amunts, K. (2020) Cytoarchitectonic Characterization and Functional Decoding of Four New Areas in the Human Lateral Orbitofrontal Cortex. Frontiers in Neuroanatomy,14(2)



Area TPJ (STG/SMG)

Julich-Brain Cytoarchitectonic Maps 2.9
└ telencephalon
  └ cerebral cortex
    └ temporal lobe
      └ temporo-parietal junction

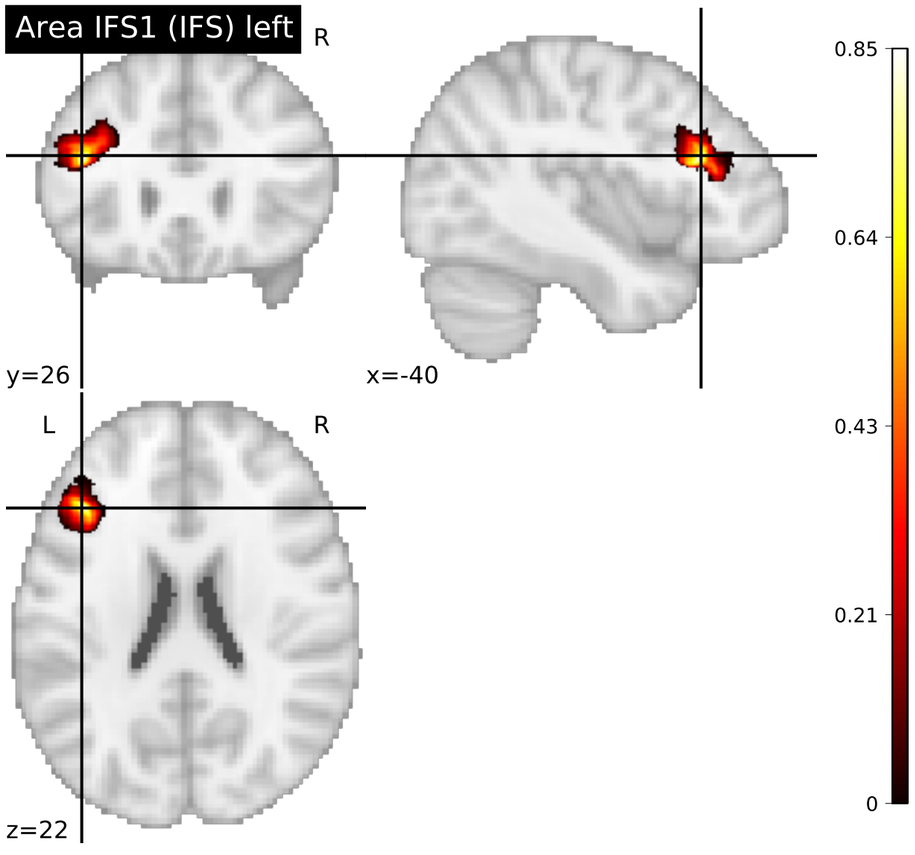


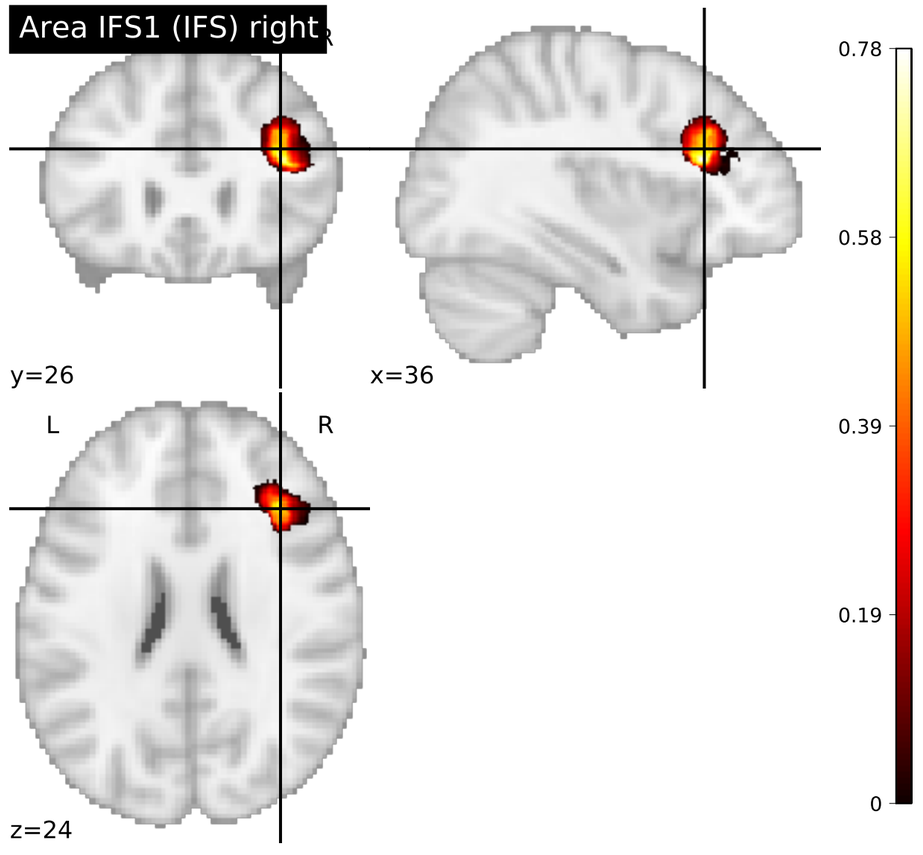


Area IFS1 (IFS)

Julich-Brain Cytoarchitectonic Maps 2.9
- telencephalon
  - cerebral cortex
    - frontal lobe
      - inferior frontal sulcus

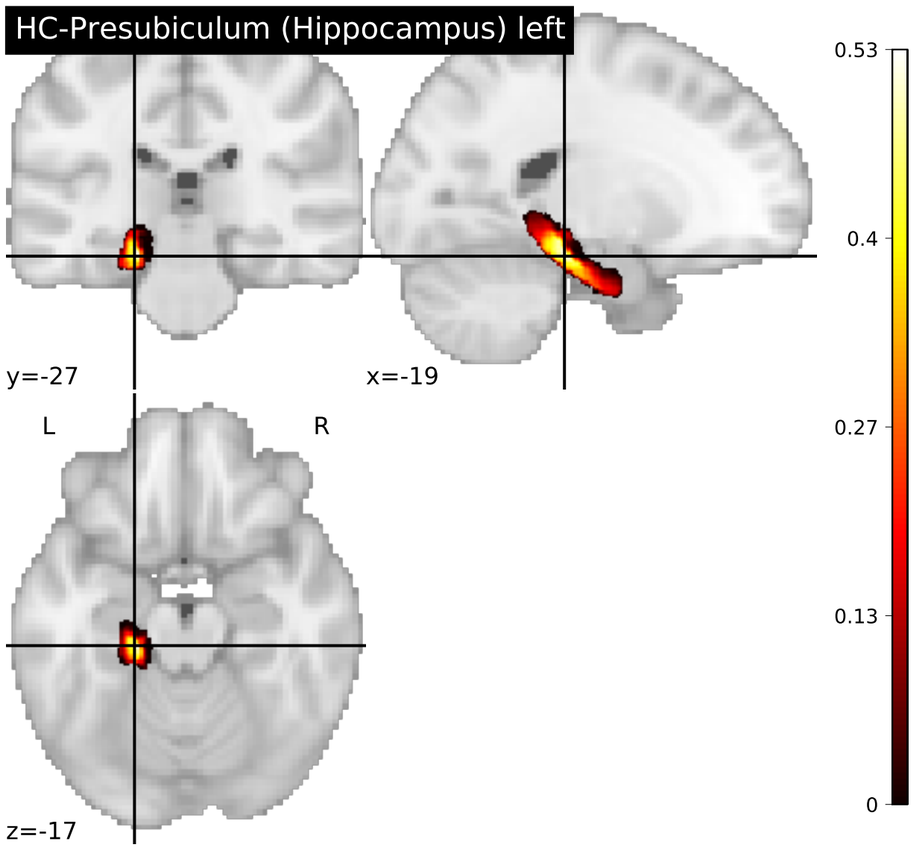
This dataset contains cytoarchitectonic maps of Area ifs1 (IFS) in the BigBrain. The mappings were created using cytoarchitectonic criteria applied on digitized histological sections of 1 µm resolution, cut in coronal plane. Areal borders have been detected by an oberserver-independent border definition (Schleicher 2000). Mappings are available on sections of the BigBrain and have been transformed to the 3D reconstructed BigBrain space using the transformations used in Amunts et al. 2013. From these delineations, a preliminary 3D map of Area ifs1 (IFS) has been created by simple interpolation of the coronal contours in the 3D anatomical space of the Big Brain. This map gives a first impression of the location of this area in the Big Brain, and can be viewed in the atlas viewer using the URL below.

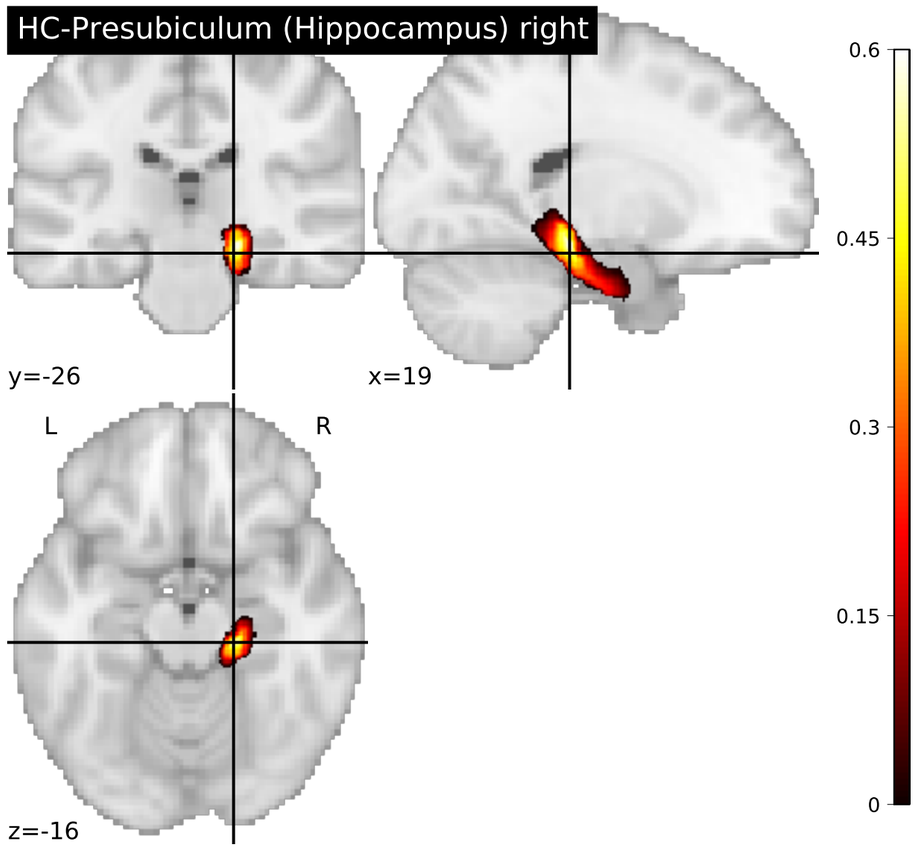




HC-Presubiculum (Hippocampus)

Julich-Brain Cytoarchitectonic Maps 2.9
└─ telencephalon
  └─ cerebral cortex
    └─ limbic lobe
      └─ hippocampal formation



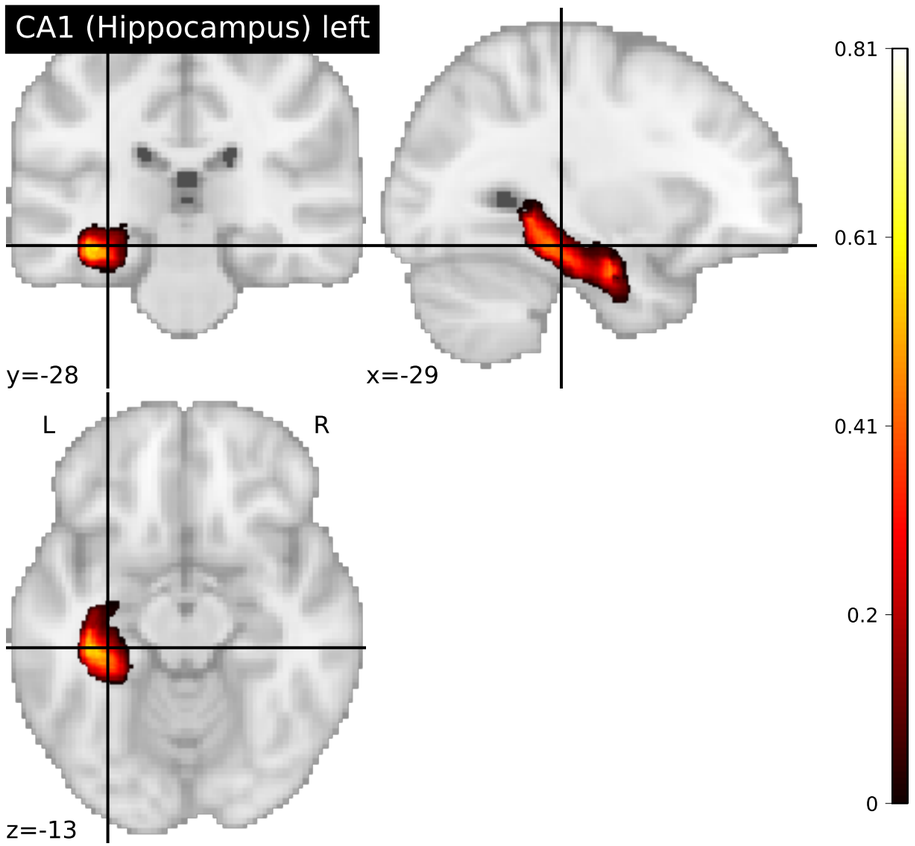


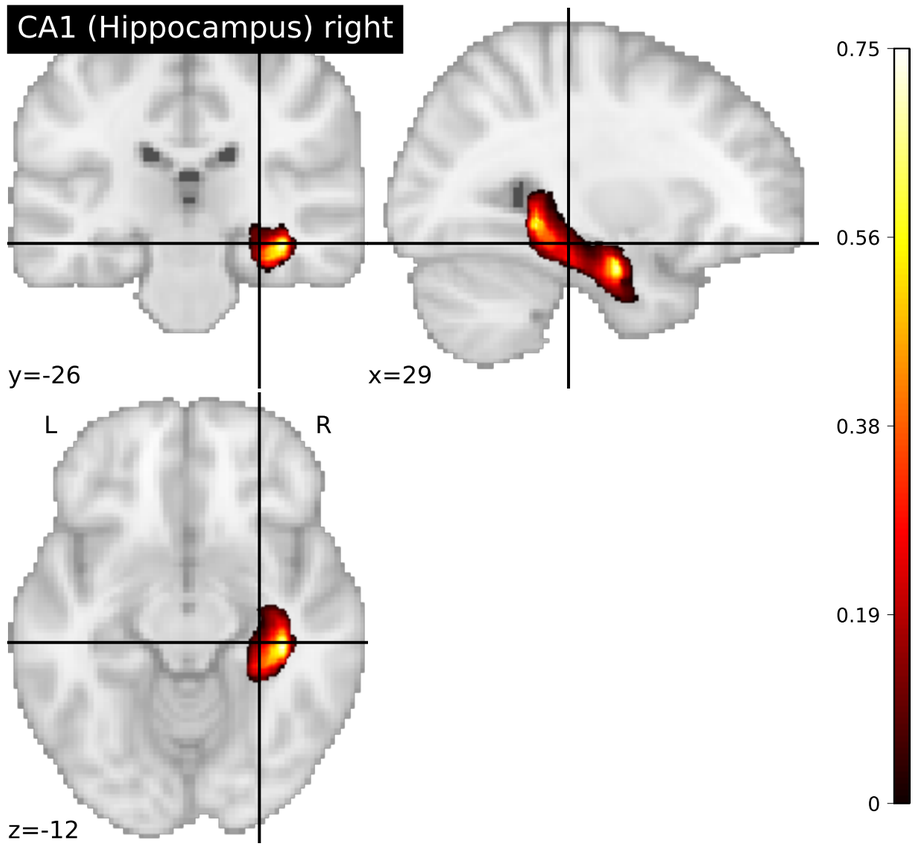
CA1 (Hippocampus)

Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral cortex
        └── limbic lobe
            └── hippocampal formation

This dataset contains the distinct probabilistic cytoarchitectonic map of CA1 (Hippocampus) in the individual, single subject template of the MNI Colin 27 reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using classical histological criteria and quantitative cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to the reference space, where each voxel was assigned the probability to belong to CA1 (Hippocampus). The probability map of CA1 (Hippocampus) is provided in NifTi format for each hemisphere in the reference space. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and updated probability estimates for new brain structures may in some cases lead to measurable but negligible deviations of existing probability maps, as compared to earlier released datasets. Other available data versions of CA1 (Hippocampus): Amunts et al. (2018) [Data set, v11b.0] [DOI: 10.25493/W4WK-QSK](https://doi.org/10.25493%2FW4WK-QSK) The most probable delineation of CA1 (Hippocampus) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.13] [DOI: 10.25493/Q3ZS-NV6](https://doi.org/10.25493%2FQ3ZS-NV6) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D)

Palomero-Gallagher, N., Kedo, O., Mohlberg, H., Zilles, K., Amunts, K. (2020) Multimodal mapping and analysis of the cyto- and receptorarchitecture of the human hippocampus. Brain Struct Funct., 225(3):881-907.



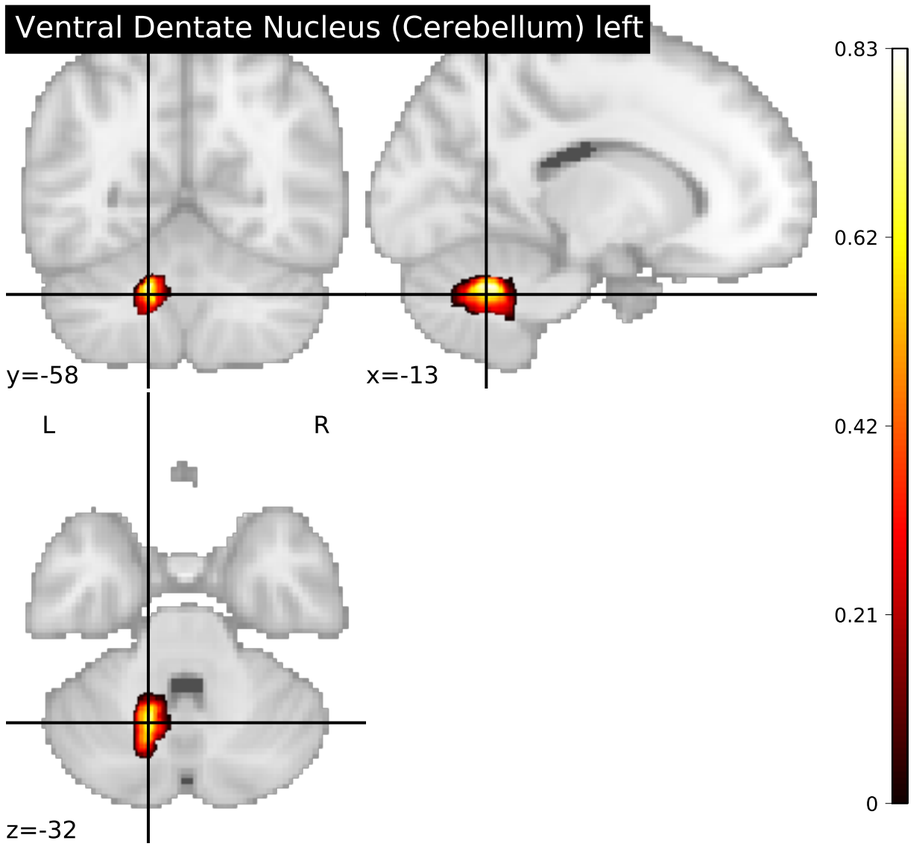


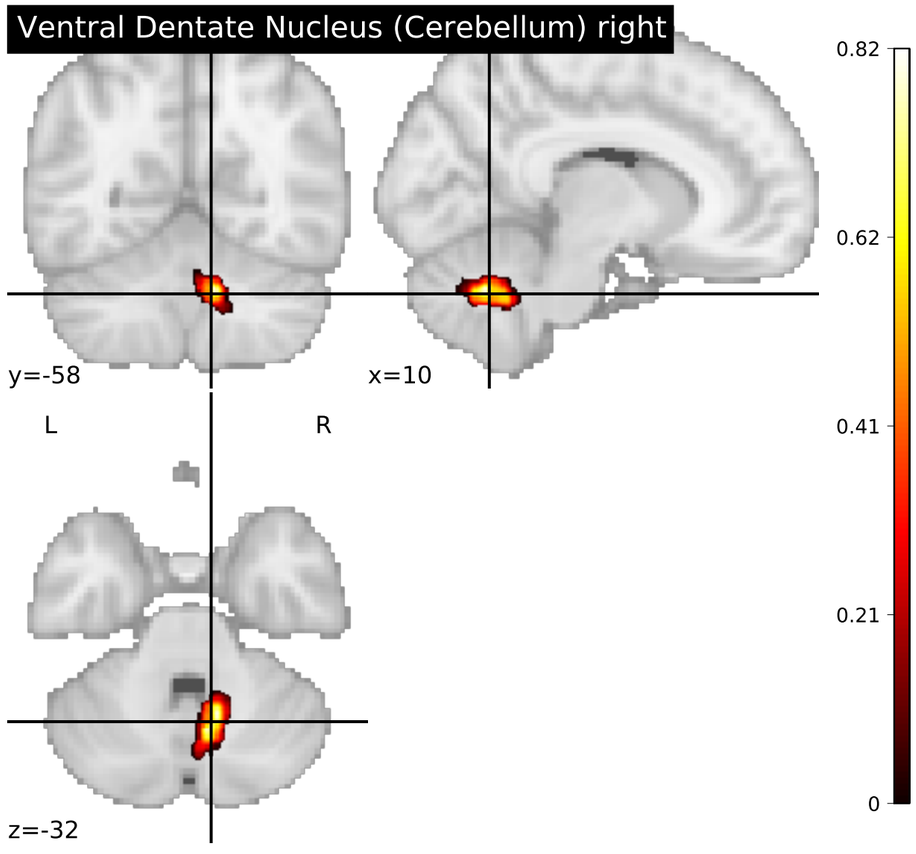
Ventral Dentate Nucleus (Cerebellum)

Julich-Brain Cytoarchitectonic Maps 2.9
└── metencephalon
  └── cerebellum
    └── cerebellar nuclei
      └── dentate nucleus

This dataset contains the distinct architectonic Ventral Dentate Nucleus (Cerebellum) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to Ventral Dentate Nucleus (Cerebellum). The probability map of Ventral Dentate Nucleus (Cerebellum) is provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Ventral Dentate Nucleus (Cerebellum): Tellmann et al. (2018) [Data set, v6.0] [DOI: 10.25493/89QC-M13](https://doi.org/10.25493%2F89QC-M13) The most probable delineation of Ventral Dentate Nucleus (Cerebellum) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.13] [DOI: 10.25493/Q3ZS-NV6](https://doi.org/10.25493%2FQ3ZS-NV6) Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D) Amunts et al. (2020) [Data set, v2.4] [DOI: 10.25493/A7Y0-NX9](https://doi.org/10.25493%2FA7Y0-NX9) Amunts et al. (2020) [Data set, v2.5] [DOI: 10.25493/8JKE-M53](https://doi.org/10.25493/8JKE-M53) Amunts et al. (2021) [Data set, v2.6] [DOI: 10.25493/KJQN-AM0](https://doi.org/10.25493%2FKJQN-AM0)

Tellmann, S., Bludau, S., Eickhoff, S., Mohlberg, H., Minnerop, M., & Amunts, K. (2015). Cytoarchitectonic mapping of the human brain cerebellar nuclei in stereotaxic space and delineation of their co-activation patterns. Frontiers in Neuroanatomy, 09.





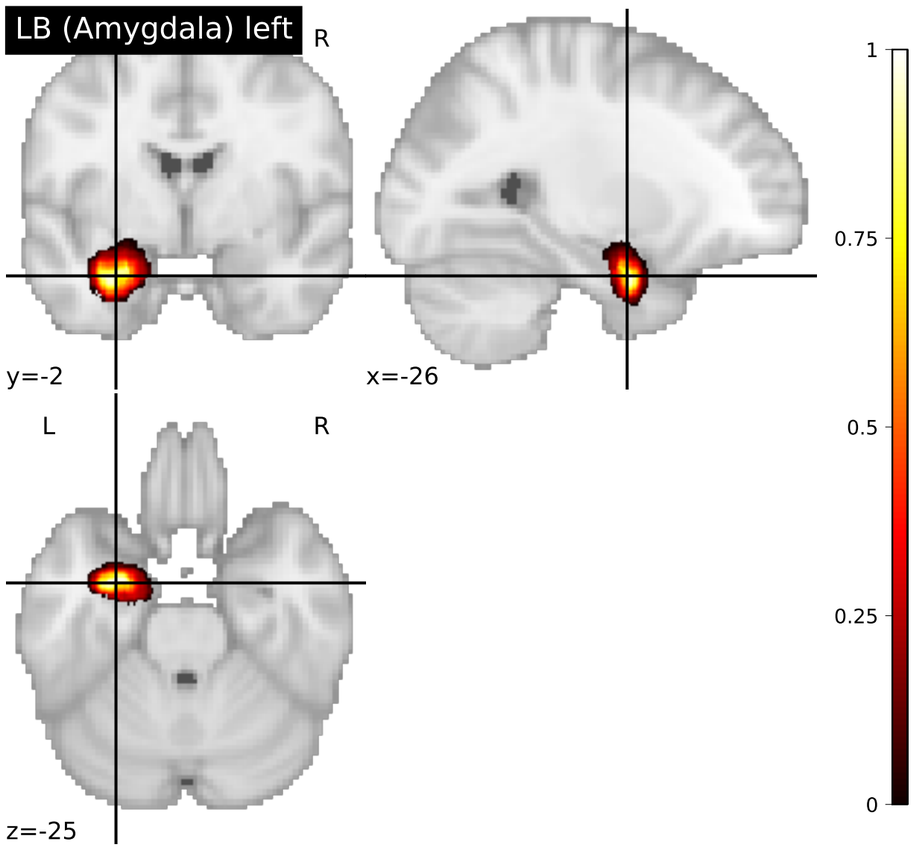
LB (Amygdala)

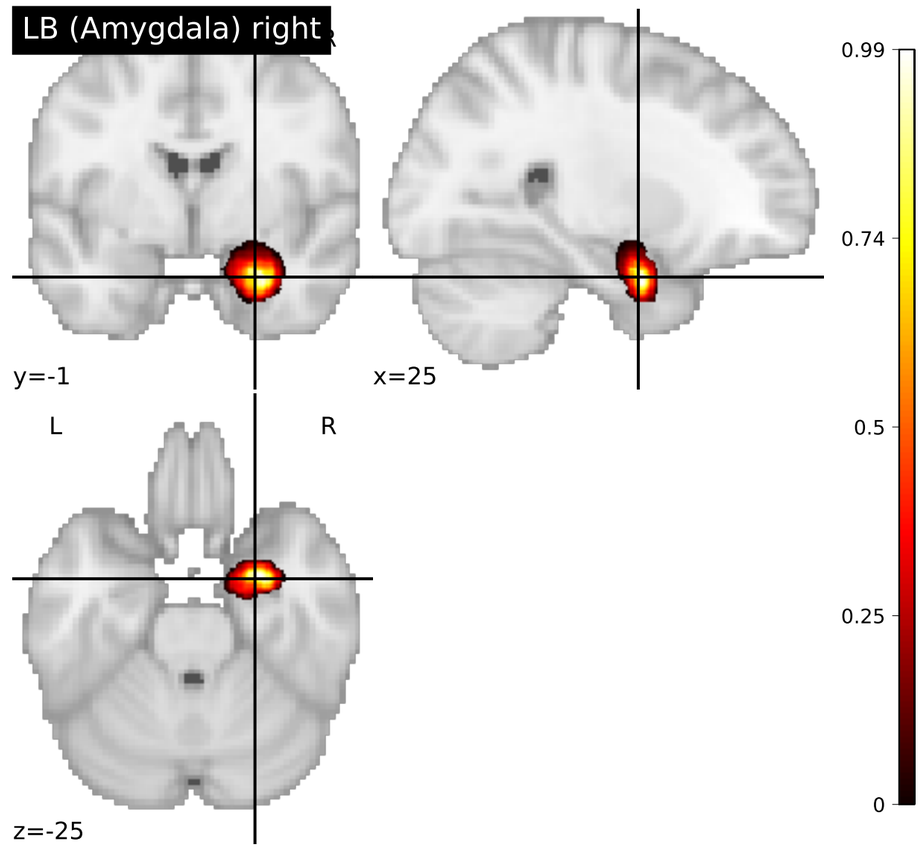
Julich-Brain Cytoarchitectonic Maps 2.9
- telencephalon
  - cerebral nuclei
    - amygdala
      - laterobasal group

This dataset contains the distinct architectonic LB (Amygdala) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to LB (Amygdala). The probability map of LB (Amygdala) is provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of LB (Amygdala): Kedo et al. (2018) [Data set, v6.1] [DOI: 10.25493/E7QC-B3Y](https://doi.org/10.25493%2FE7QC-B3Y) The most probable delineation of LB (Amygdala) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.13] [DOI: 10.25493/Q3ZS-NV6](https://doi.org/10.25493%2FQ3ZS-NV6) Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D)

Kedo, O., Zilles, K., Palomero-Gallagher, N., Schleicher, A., Mohlberg, H., Bludau, S., Amunts, K. (2018). Receptor-driven, multimodal mapping of the human amygdala. Brain Struct Funct., 223(4):1637-1666.

Amunts, K., Kedo, O., Kindler, M., Pieperhoff, P., Mohlberg, H., Shah, N. J.,... Zilles, K. (2005). Cytoarchitectonic mapping of the human amygdala, hippocampal region and entorhinal cortex: intersubject variability and probability maps. Anatomy and Embryology, 210(5-6), 343–352.



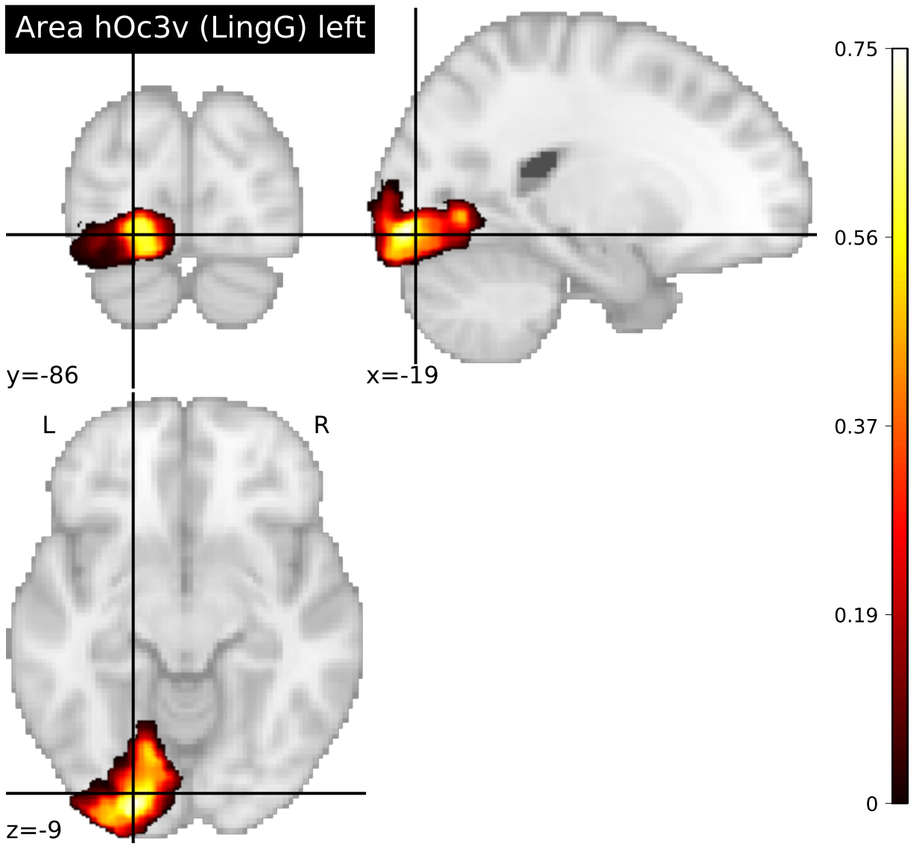


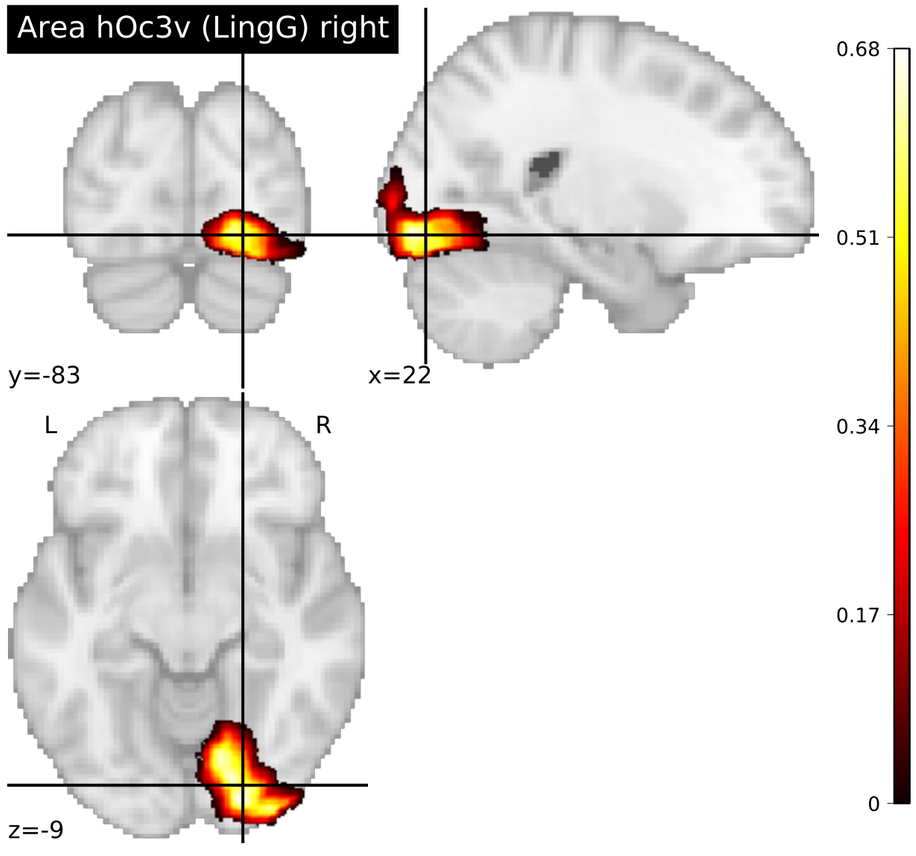
Area hOc3v (LingG)

Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral cortex
        └── occiptal lobe
            └── ventral occipital cortex

This dataset contains the distinct architectonic Area hOc3v (LingG) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to Area hOc3v (LingG). The probability map of Area hOc3v (LingG) is provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Area hOc3v (LingG): Rottschy et al. (2018) [Data set, v3.2] [DOI: 10.25493/3K39-DNC](https://doi.org/10.25493%2F3K39-DNC) The most probable delineation of Area hOc3v (LingG) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.13] [DOI: 10.25493/Q3ZS-NV6](https://doi.org/10.25493%2FQ3ZS-NV6) Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D)

Rottschy, C., Eickhoff, S. B., Schleicher, A., Mohlberg, H., Kujovic, M., Zilles, K., & Amunts, K. (2007). Ventral visual cortex in humans: Cytoarchitectonic mapping of two extrastriate areas. Human Brain Mapping, 28(10), 1045–1059.





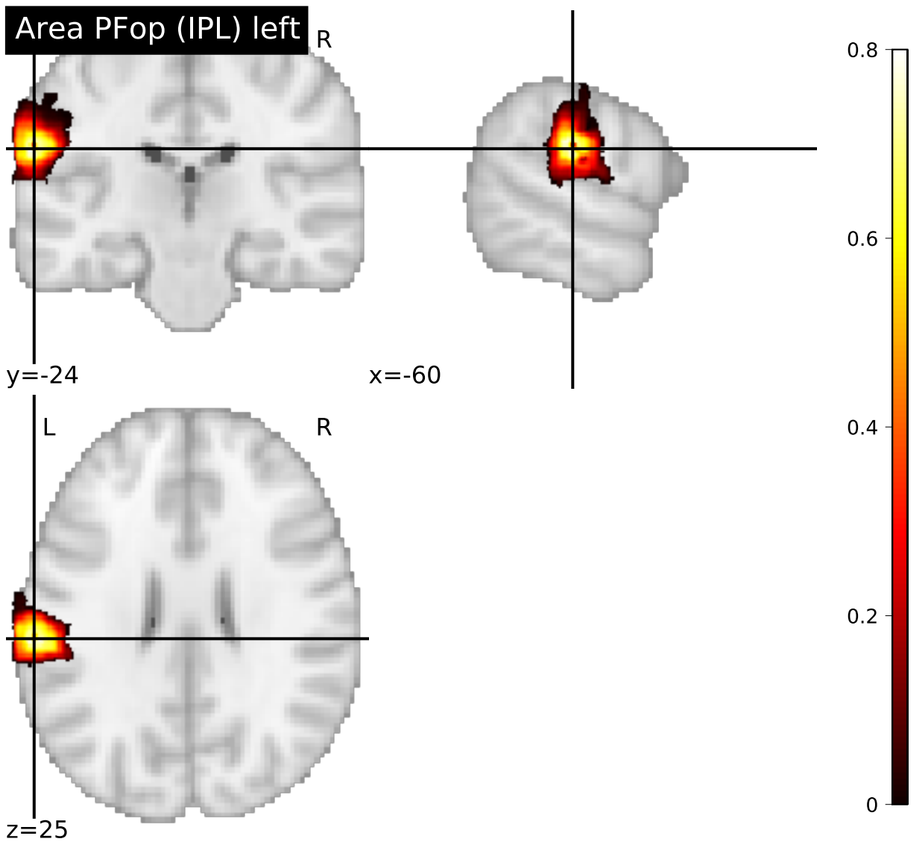
Area PFop (IPL)

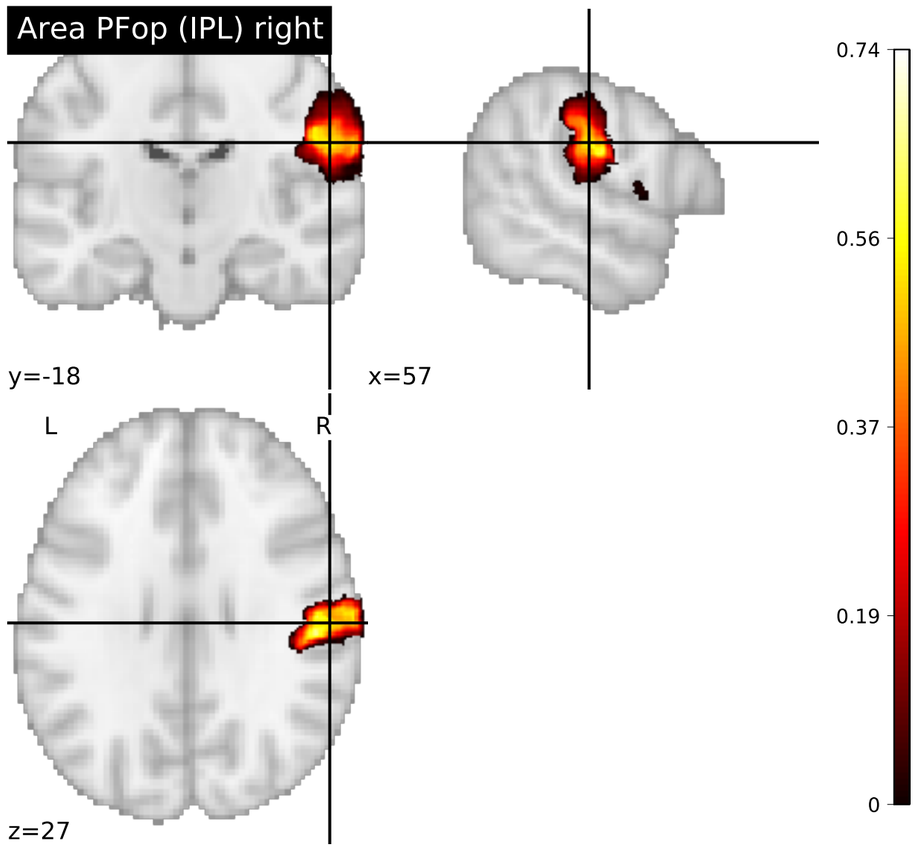
Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral cortex
        └── parietal lobe
            └── inferior parietal lobule

This dataset contains the distinct architectonic Area PFop (IPL) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to Area PFop (IPL). The probability map of Area PFop (IPL) is provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Area PFop (IPL): Caspers et al. (2018) [Data set, v9.2] [DOI: 10.25493/XYBW-69Q](https://doi.org/10.25493%2FXYBW-69Q) The most probable delineation of Area PFop (IPL) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.13] [DOI: 10.25493/Q3ZS-NV6](https://doi.org/10.25493%2FQ3ZS-NV6) Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D)

Caspers, S., Geyer, S., Schleicher, A., Mohlberg, H., Amunts, K., & Zilles, K. (2006). The human inferior parietal cortex: Cytoarchitectonic parcellation and interindividual variability. NeuroImage, 33(2), 430–448.

Caspers, S., Eickhoff, S. B., Geyer, S., Scheperjans, F., Mohlberg, H., Zilles, K., & Amunts, K. (2008). The human inferior parietal lobule in stereotaxic space. Brain Structure and Function, 212(6), 481–495.



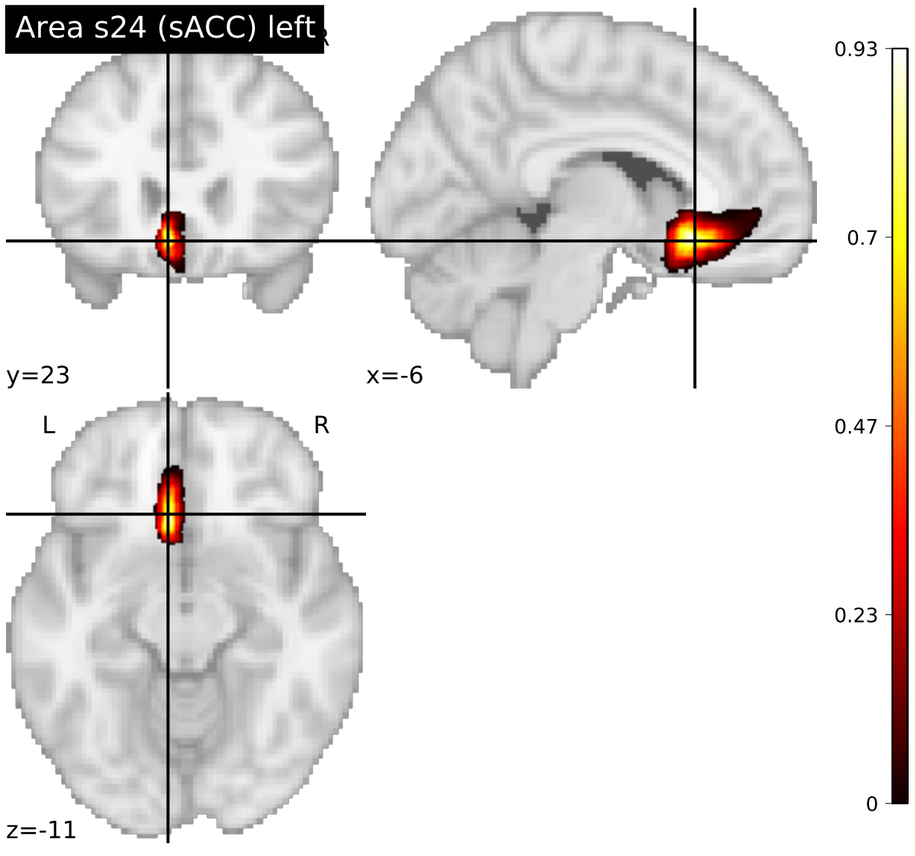


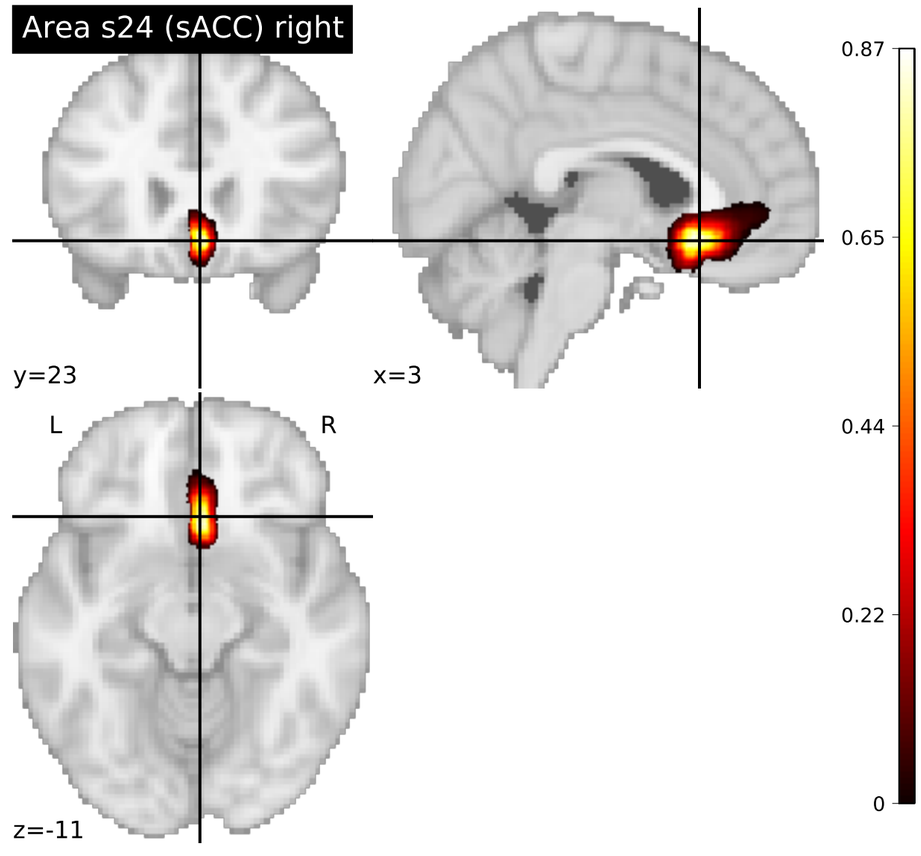
Area s24 (sACC)

Julich-Brain Cytoarchitectonic Maps 2.9
- telencephalon
  - cerebral cortex
    - limbic lobe
      - cingulate gyrus, frontal part

This dataset contains the distinct architectonic Area s24 (sACC) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to Area s24 (sACC). The probability map of Area s24 (sACC) is provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Area s24 (sACC): Palomero-Gallagher et al. (2018) [Data set, v16.0] [DOI: 10.25493/FQ3R-3JX](https://doi.org/10.25493%2FFQ3R-3JX) The most probable delineation of Area s24 (sACC) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.13] [DOI: 10.25493/Q3ZS-NV6](https://doi.org/10.25493%2FQ3ZS-NV6) Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D)

Palomero-Gallagher, N., Eickhoff, S. B., Hoffstaedter, F., Schleicher, A., Mohlberg, H., Vogt, B. A.,... Zilles, K. (2015). Functional organization of human subgenual cortical areas: Relationship between architectonical segregation and connectional heterogeneity. NeuroImage, 115, 177–190.



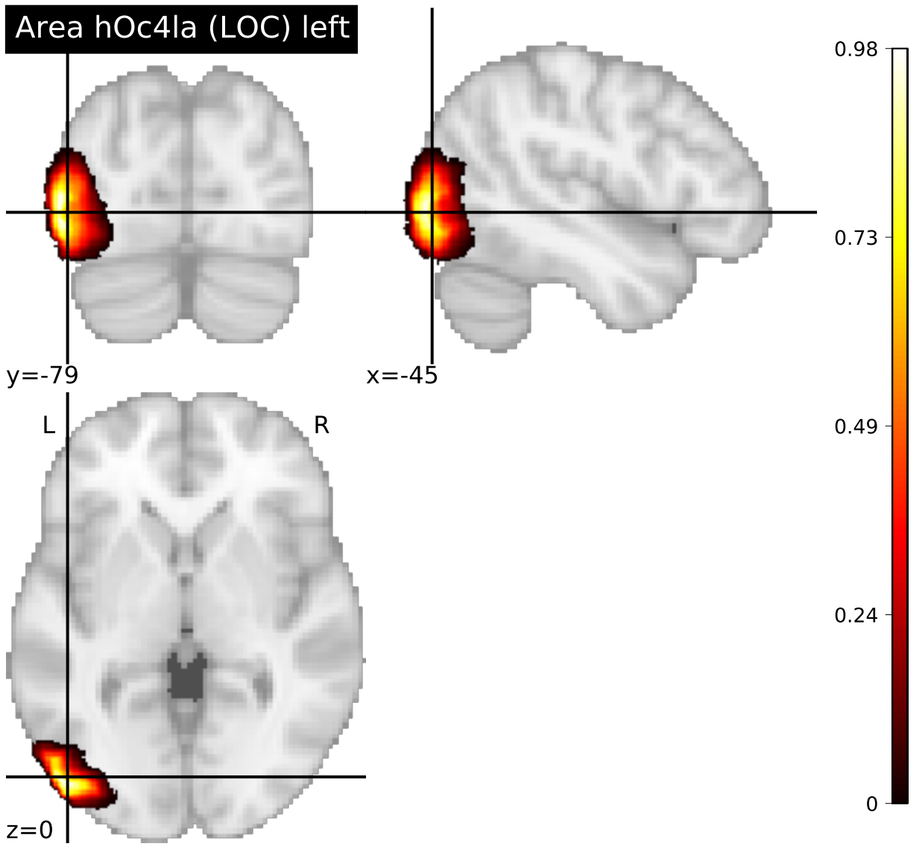


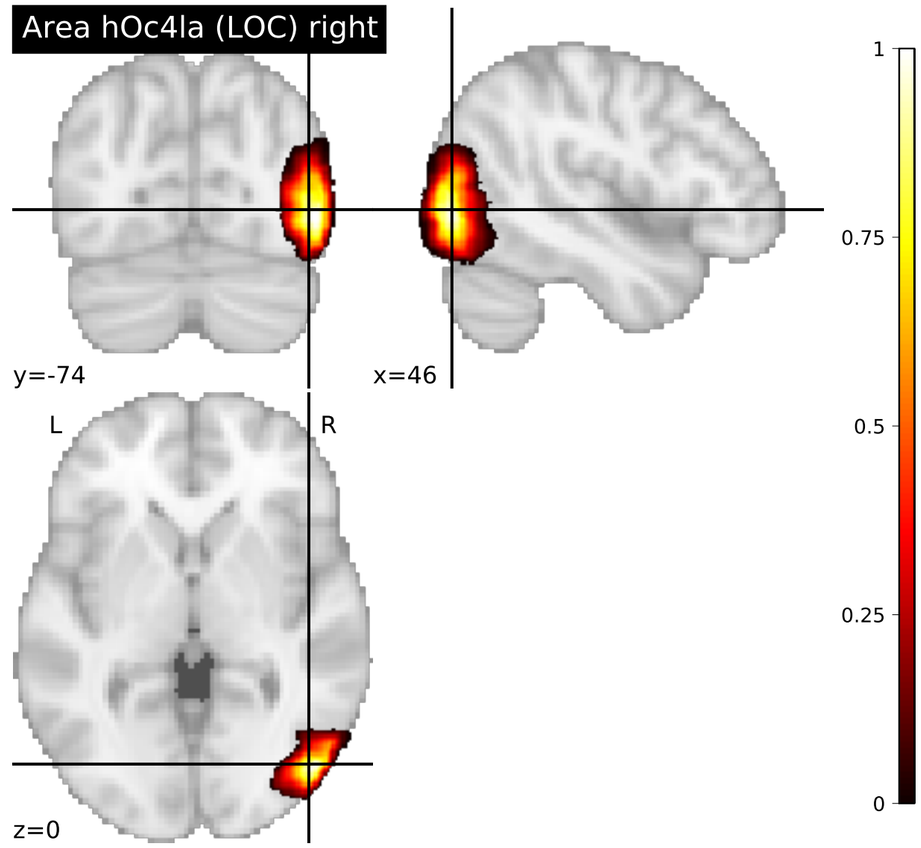
Area hOc4la (LOC)

Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral cortex
        └── occiptal lobe
            └── lateral occipital cortex

This dataset contains the distinct architectonic Area hOc4la (LOC) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to Area hOc4la (LOC). The probability map of Area hOc4la (LOC) is provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Area hOc4la (LOC): Malikovic et al. (2018) [Data set, v3.2] [DOI: 10.25493/FCQW-EZU](https://doi.org/10.25493%2FFCQW-EZU) The most probable delineation of Area hOc4la (LOC) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.13] [DOI: 10.25493/Q3ZS-NV6](https://doi.org/10.25493%2FQ3ZS-NV6) Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D)

Malikovic, A., Amunts, K., Schleicher, A., Mohlberg, H., Kujovic, M., Palomero-Gallagher, N., … Zilles, K. (2015). Cytoarchitecture of the human lateral occipital cortex: mapping of two extrastriate areas hOc4la and hOc4lp. Brain Structure and Function, 221(4), 1877–1897.

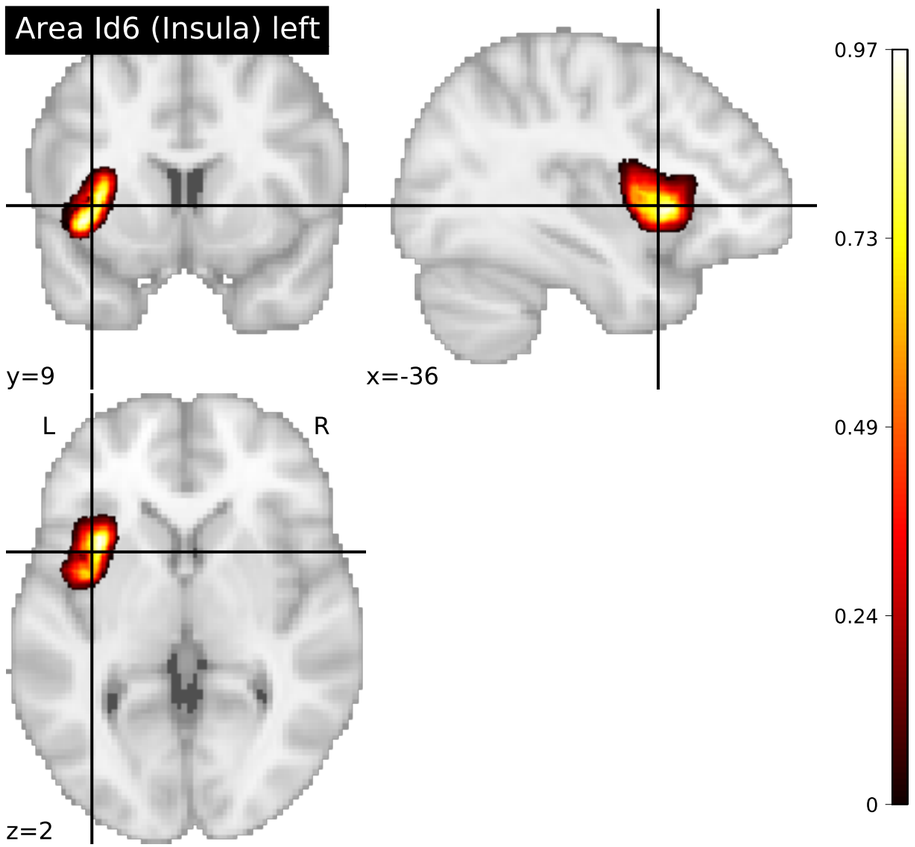


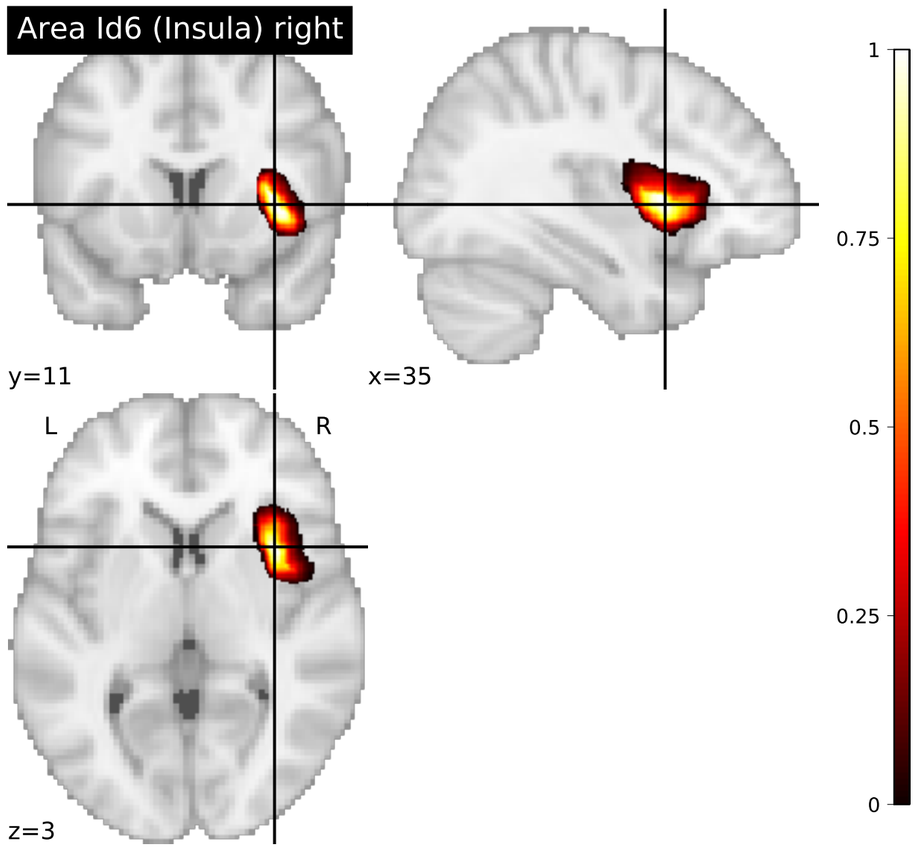


Area Id6 (Insula)

Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral cortex
        └── insula
            └── dysgranular insula

This dataset contains the distinct architectonic Area Id6 (Insula) in the MNI Colin 27 and MNI ICBM 152 reference spaces. As part of the Julich-Brain atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. Subsequently the results of the cytoarchitectonic analysis are mapped to the MNI Colin 27 and MNI ICBM 152 reference spaces where each voxel is assigned with the probability to belong to Area Id6 (Insula). The probability map of Area Id6 (Insula) are provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. The most probable delineation of Area Id6 (Insula) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493/8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493/TAKY-64D)





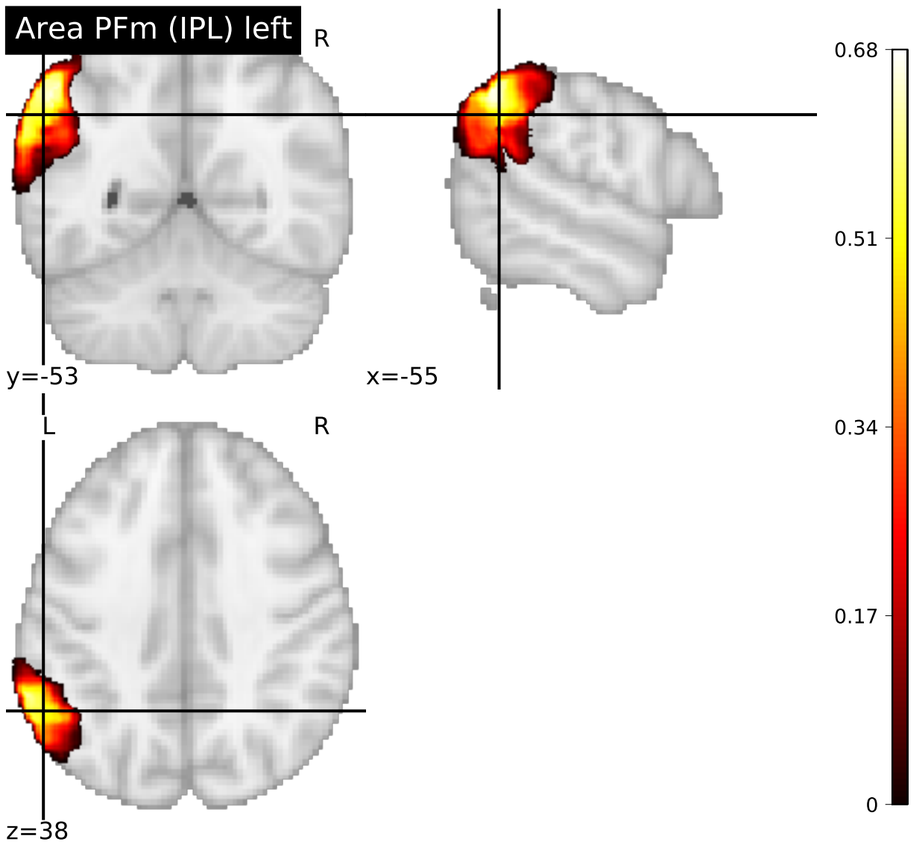
Area PFm (IPL)

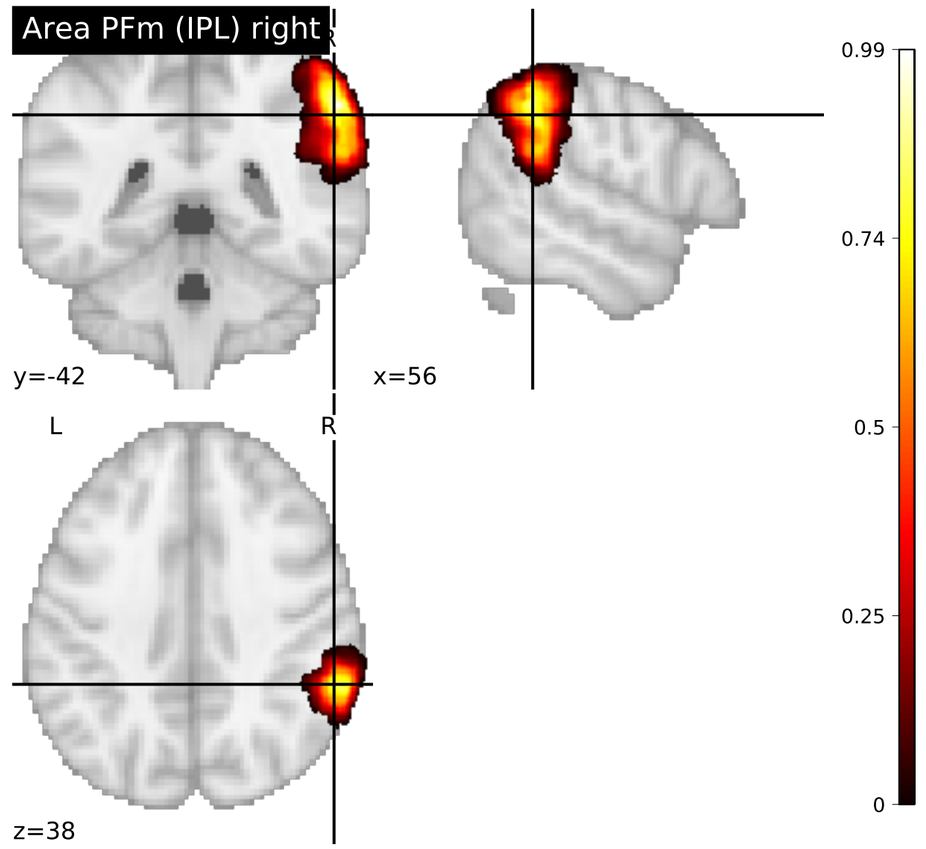
Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral cortex
        └── parietal lobe
            └── inferior parietal lobule

This dataset contains the distinct architectonic Area PFm (IPL) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to Area PFm (IPL). The probability map of Area PFm (IPL) is provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Area PFm (IPL): Caspers et al. (2018) [Data set, v9.2] [DOI: 10.25493/AJGE-PNH](https://doi.org/10.25493%2FAJGE-PNH) The most probable delineation of Area PFm (IPL) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.13] [DOI: 10.25493/Q3ZS-NV6](https://doi.org/10.25493%2FQ3ZS-NV6) Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D)

Caspers, S., Geyer, S., Schleicher, A., Mohlberg, H., Amunts, K., & Zilles, K. (2006). The human inferior parietal cortex: Cytoarchitectonic parcellation and interindividual variability. NeuroImage, 33(2), 430–448.

Caspers, S., Eickhoff, S. B., Geyer, S., Scheperjans, F., Mohlberg, H., Zilles, K., & Amunts, K. (2008). The human inferior parietal lobule in stereotaxic space. Brain Structure and Function, 212(6), 481–495.



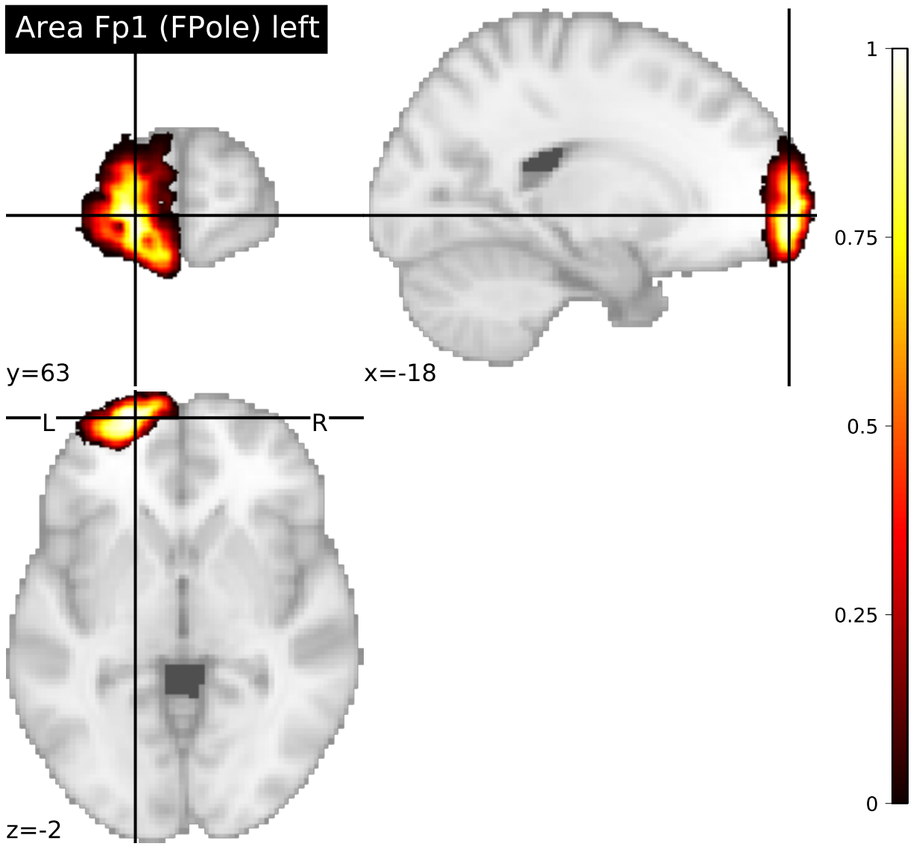


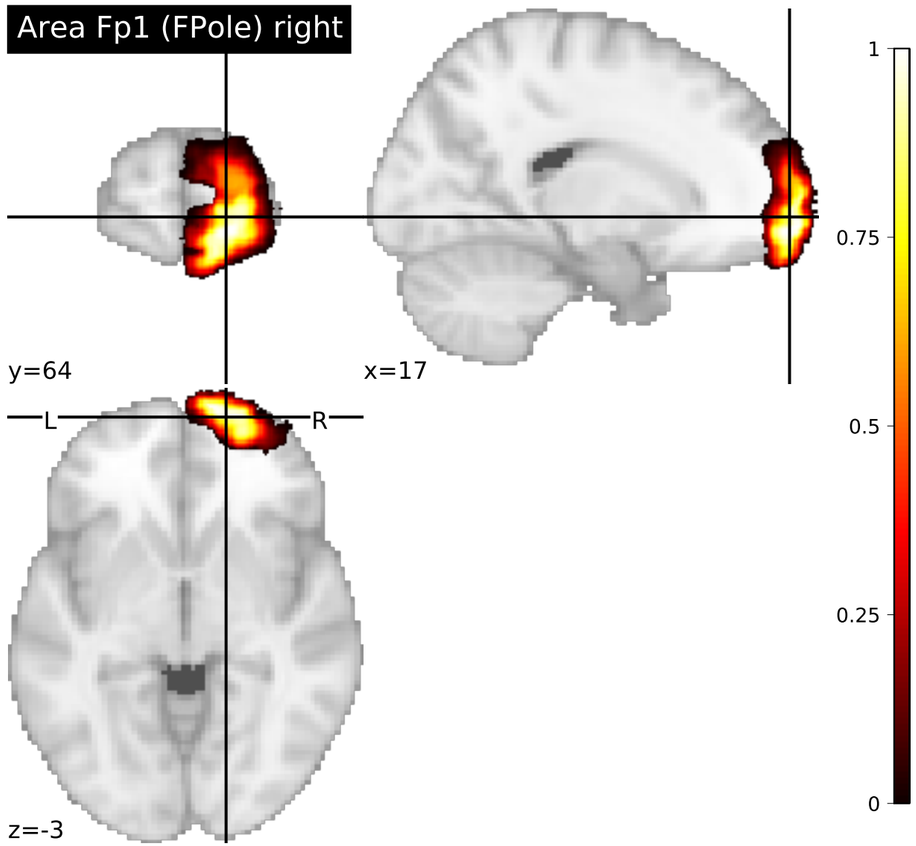
Area Fp1 (FPole)

Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral cortex
        └── frontal lobe
            └── frontal pole

This dataset contains the distinct architectonic Area Fp1 (FPole) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to Area Fp1 (FPole). The probability map of Area Fp1 (FPole) are provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Area Fp1 (FPole): Bludau et al. (2018) [Data set, v2.2] [DOI: 10.25493/RPDP-VMG](https://doi.org/10.25493%2FRPDP-VMG) The most probable delineation of Area Fp1 (FPole) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.13] [DOI: 10.25493/Q3ZS-NV6](https://doi.org/10.25493%2FQ3ZS-NV6) Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D)

Bludau, S., Eickhoff, S. B., Mohlberg, H., Caspers, S., Laird, A. R., Fox, P. T.,... Amunts, K. (2014). Cytoarchitecture, probability maps and functions of the human frontal pole. NeuroImage, 93, 260–275.



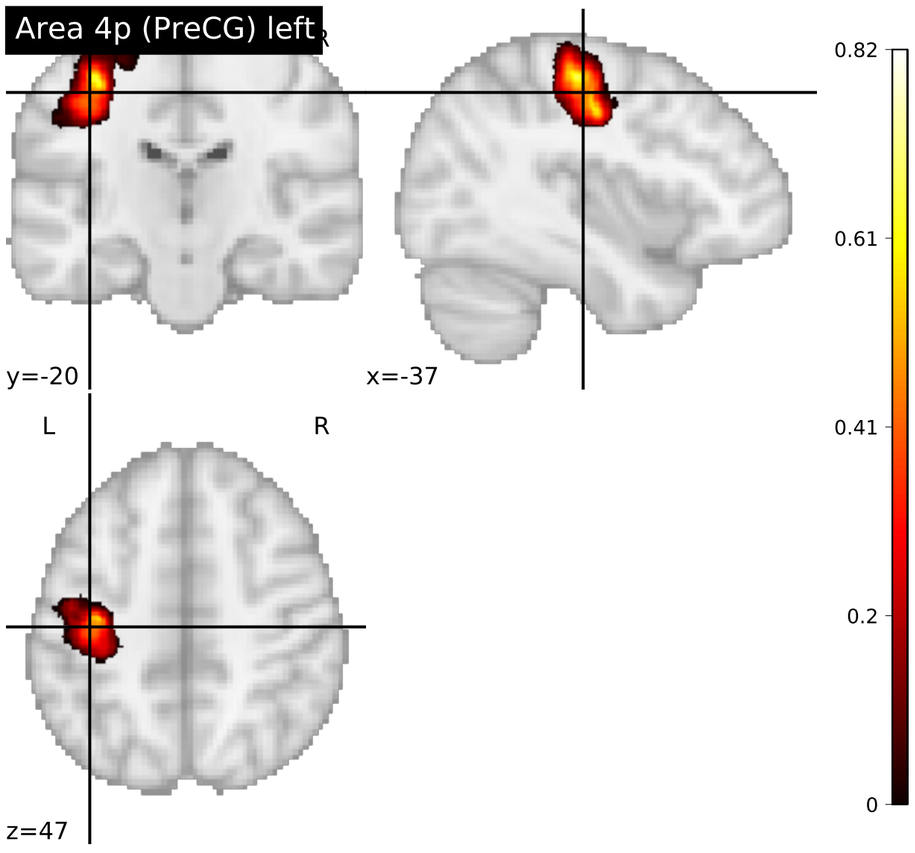


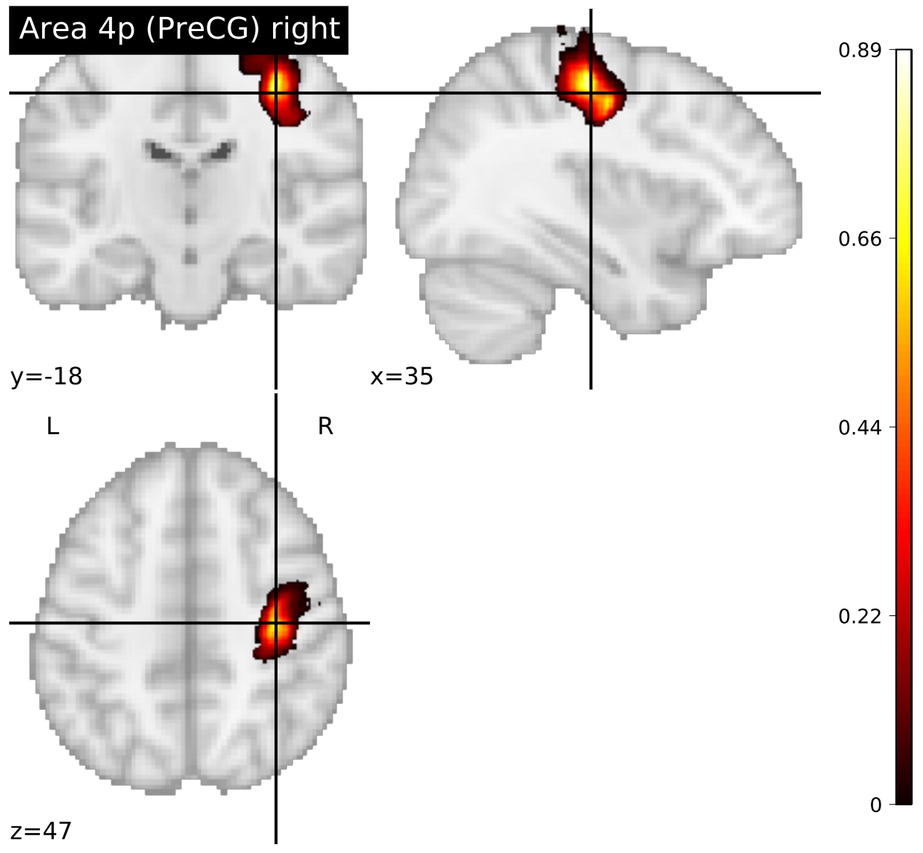
Area 4p (PreCG)

Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral cortex
        └── frontal lobe
            └── precentral gyrus

This dataset contains the distinct architectonic Area 4p (PreCG) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to Area 4p (PreCG). The probability map of Area 4p (PreCG) are provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Area 4p (PreCG): Geyer et al. (2018) [Data set, v9.2] [DOI: 10.25493/ECYA-0D1](https://doi.org/10.25493%2FECYA-0D1) The most probable delineation of Area 4p (PreCG) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.13] [DOI: 10.25493/Q3ZS-NV6](https://doi.org/10.25493%2FQ3ZS-NV6) Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D)

Geyer, S., Ledberg, A., Schleicher, A., Kinomura, S., Schormann, T., Bürgel, U.,… Roland, P. E. (1996). Two different areas within the primary motor cortex of man. Nature, 382(6594), 805–807.

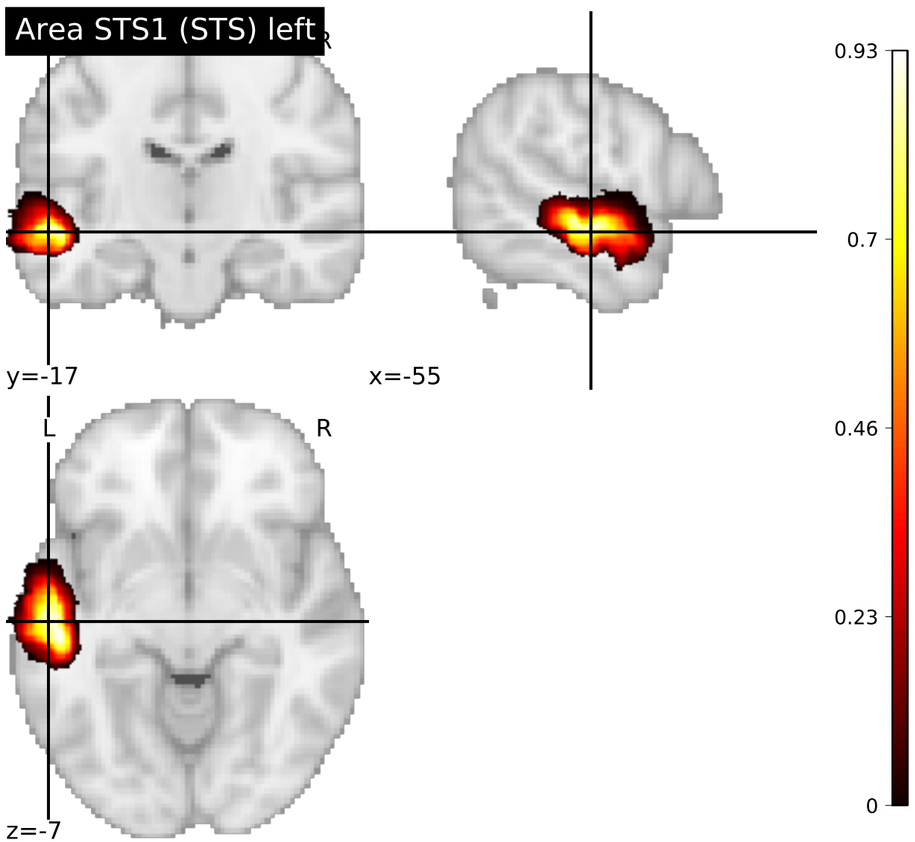


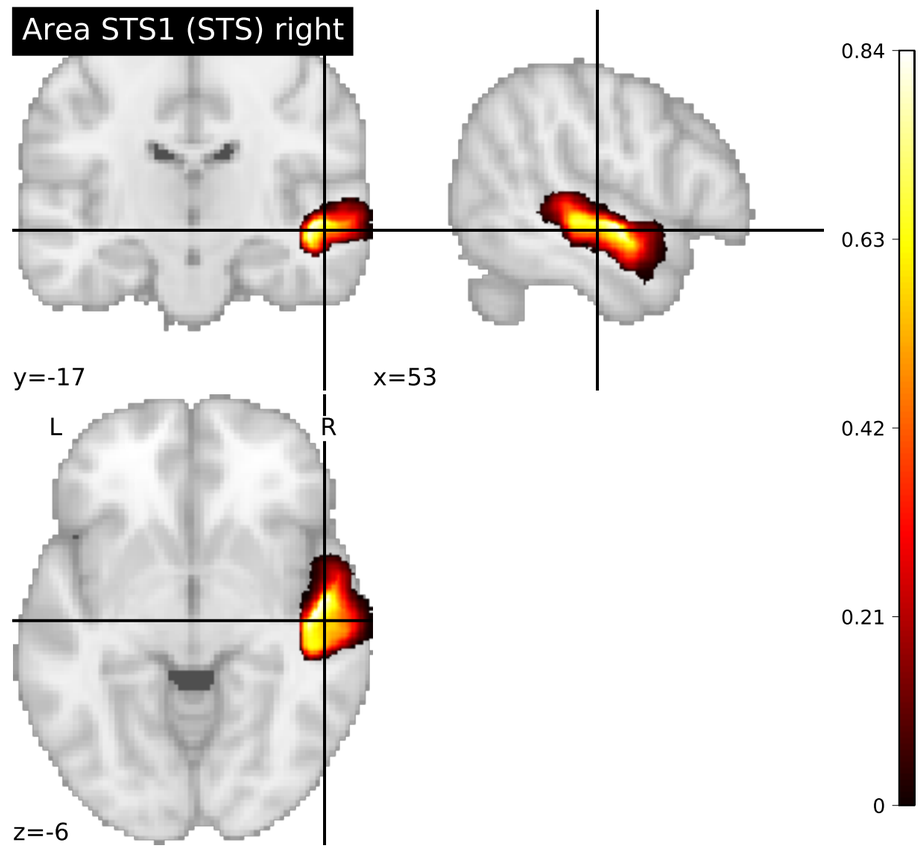


Area STS1 (STS)

Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral cortex
        └── temporal lobe
            └── superior temporal sulcus

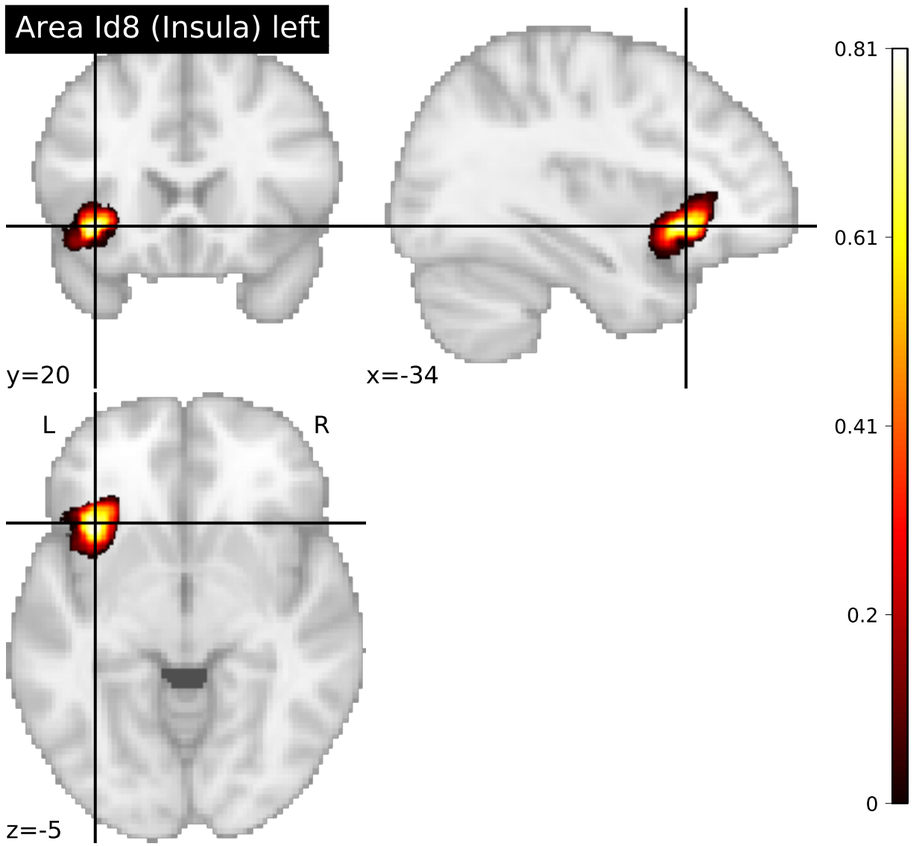
This dataset contains the distinct architectonic Area STS1 (STS) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to Area STS1 (STS). The probability map of Area STS1 (STS) is provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Area STS1 (STS): Zachlod et al. (2019) [Data set, v3.0] [DOI: 10.25493/2G11-1WA](https://doi.org/10.25493%2F2G11-1WA) The most probable delineation of Area STS1 (STS) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D)

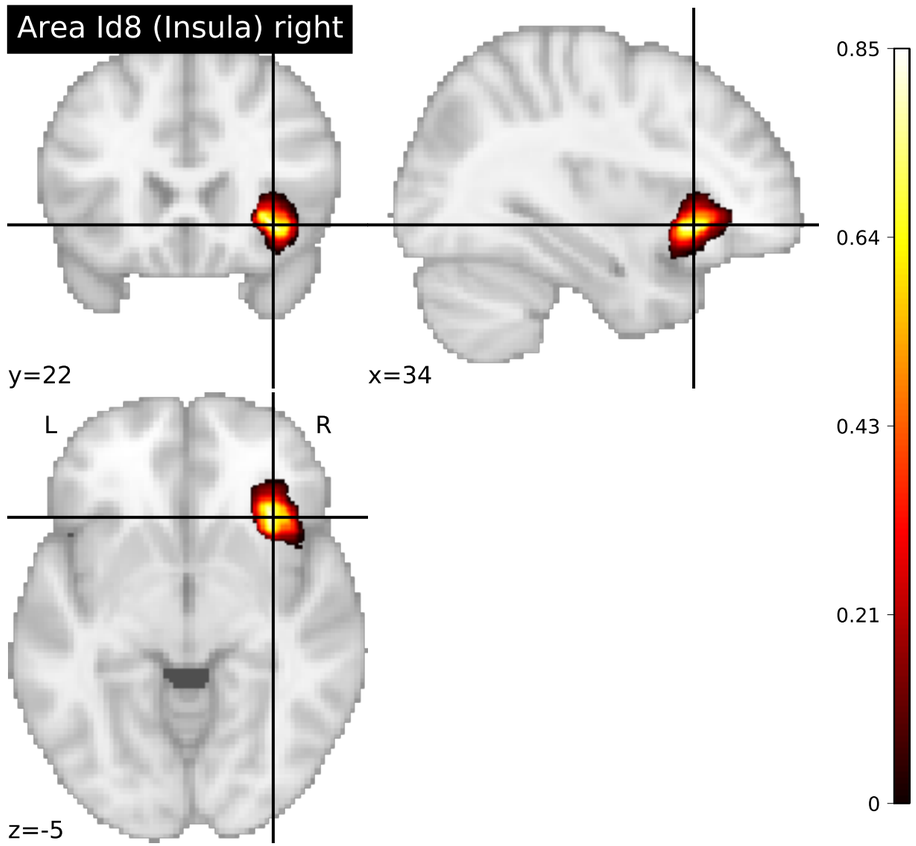




Area Id8 (Insula)

Julich-Brain Cytoarchitectonic Maps 2.9
└─ telencephalon
  └─ cerebral cortex
    └─ insula
      └─ dysgranular insula





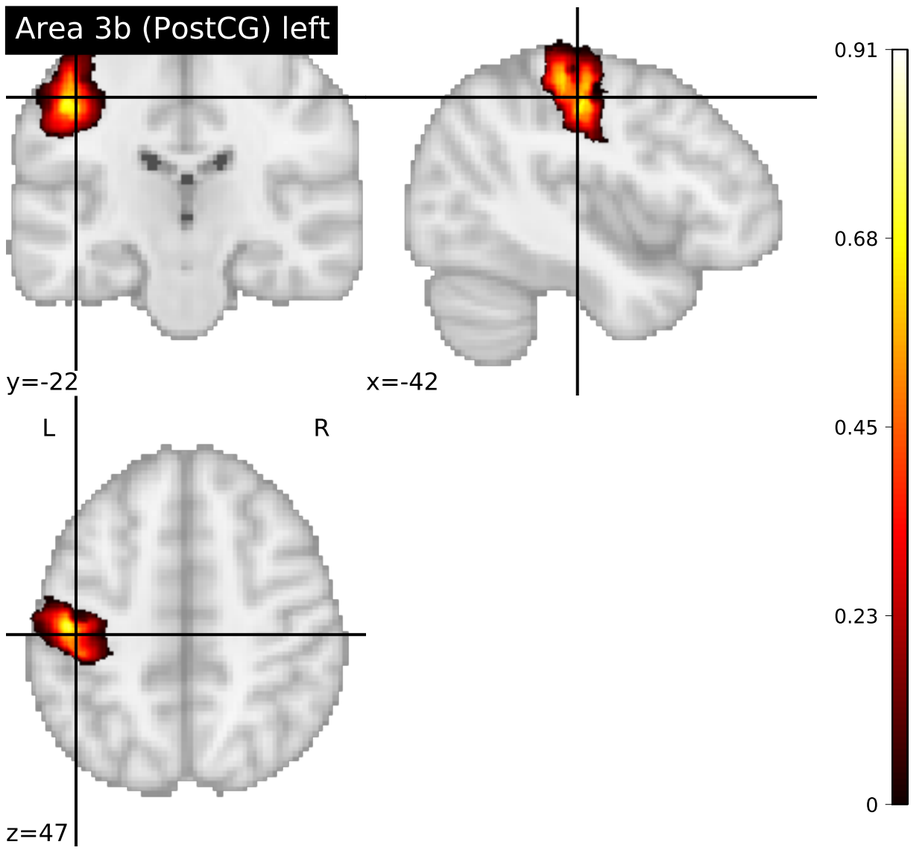
Area 3b (PostCG)

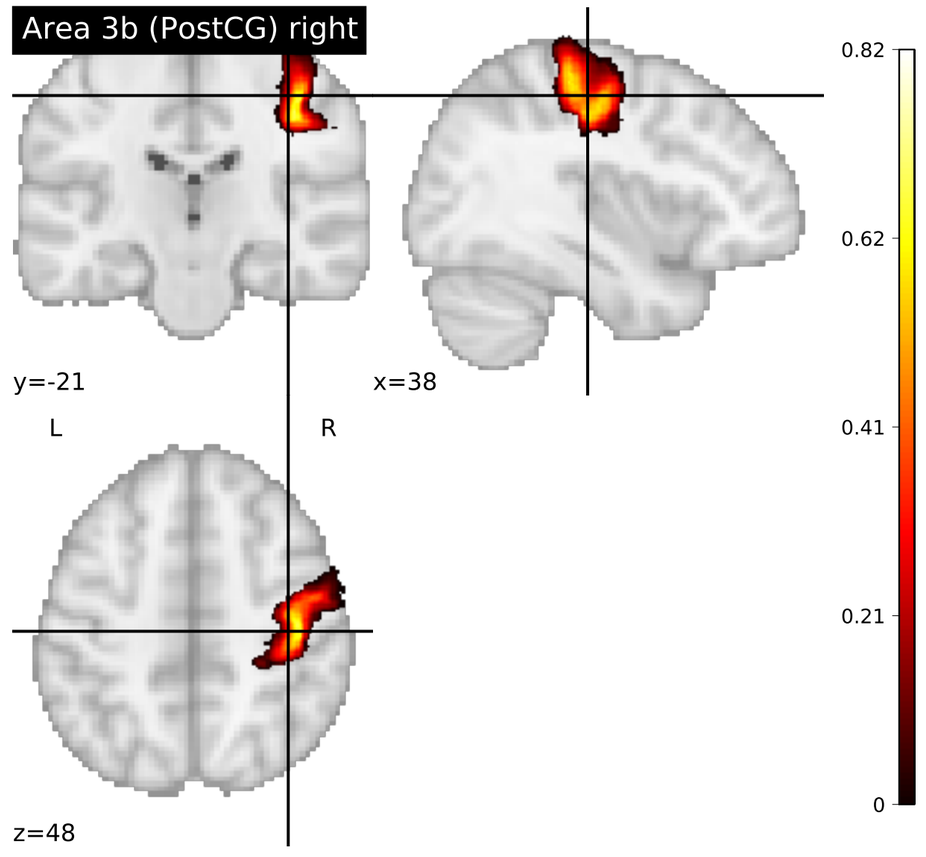
Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral cortex
        └── parietal lobe
            └── postcentral gyrus

This dataset contains the distinct architectonic Area 3b (PostCG) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to Area 3b (PostCG). The probability map of Area 3b (PostCG) are provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Area 3b (PostCG): Geyer et al. (2018) [Data set, v8.2] [DOI: 10.25493/W4WS-B3P](https://doi.org/10.25493%2FW4WS-B3P) The most probable delineation of Area 3b (PostCG) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.13] [DOI: 10.25493/Q3ZS-NV6](https://doi.org/10.25493%2FQ3ZS-NV6) Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D)

Geyer, S., Schleicher, A., & Zilles, K. (1999). Areas 3a, 3b, and 1 of Human Primary Somatosensory Cortex. NeuroImage, 10(1), 63–83.

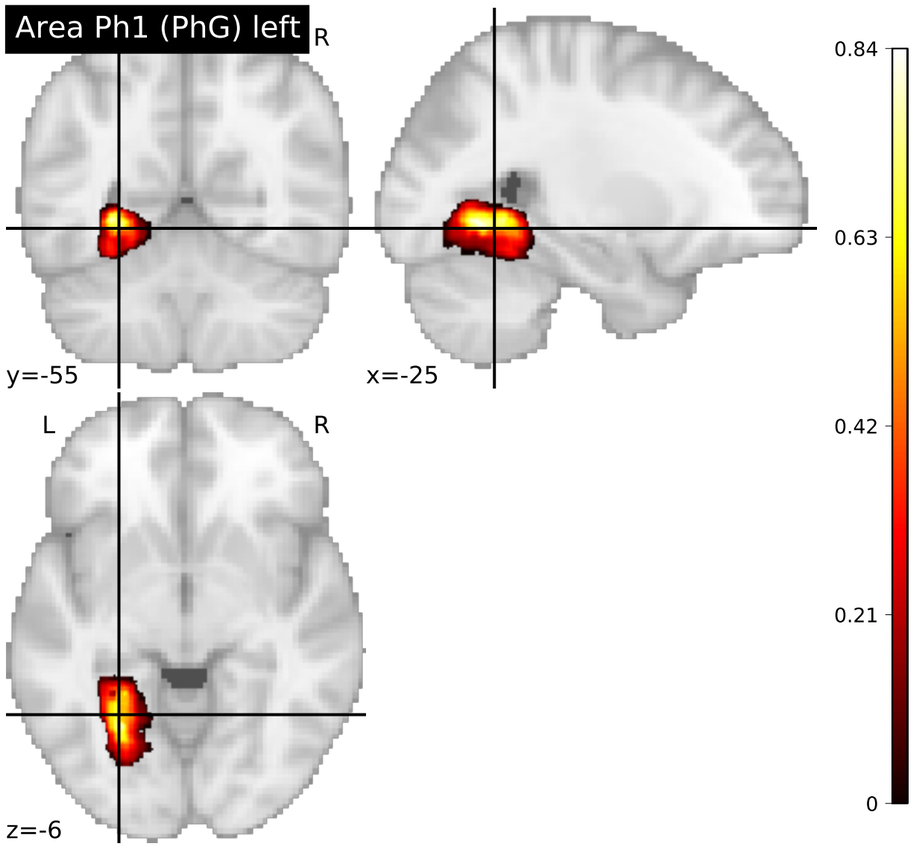
Geyer, S., Schormann, T., Mohlberg, H., & Zilles, K. (2000). Areas 3a, 3b, and 1 of Human Primary Somatosensory Cortex. NeuroImage, 11(6), 684–696.





Area Ph1 (PhG)

Julich-Brain Cytoarchitectonic Maps 2.9
└ telencephalon
  └ cerebral cortex
    └ temporal lobe
      └ parahippocampal gyrus

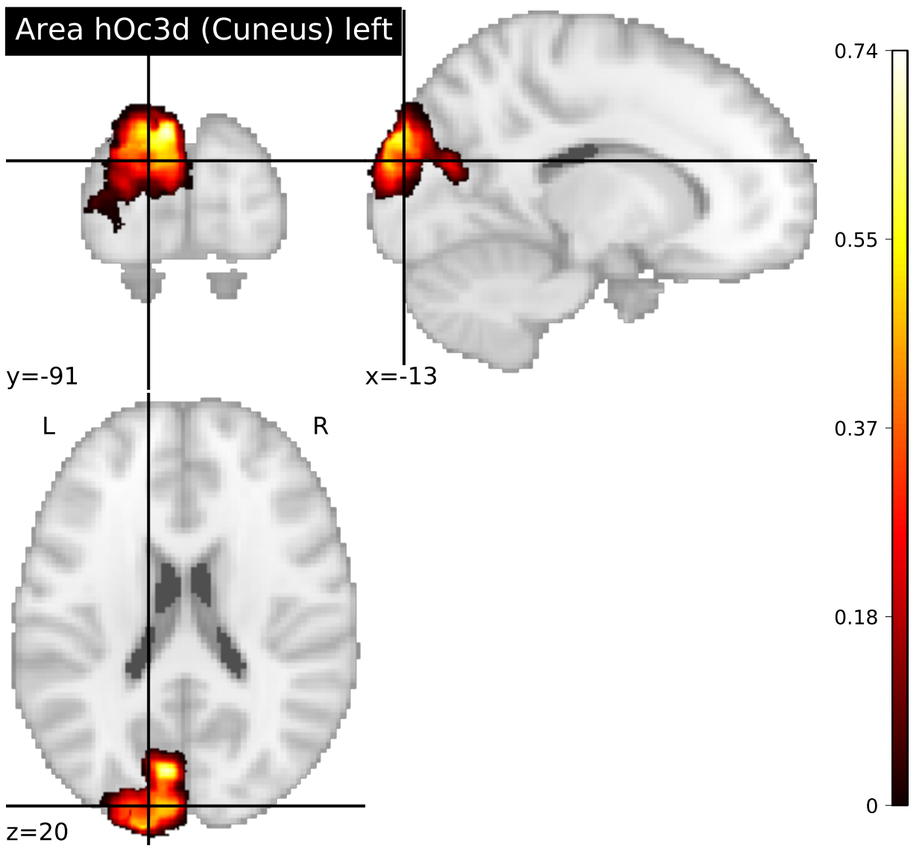


Area hOc3d (Cuneus)

Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral cortex
        └── occiptal lobe
            └── dorsal occipital cortex

This dataset contains the distinct architectonic Area hOc3d (Cuneus) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to Area hOc3d (Cuneus). The probability map of Area hOc3d (Cuneus) is provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Area hOc3d (Cuneus): Kujovic et al. (2018) [Data set, v2.2] [DOI: 10.25493/SAMM-YKZ](https://doi.org/10.25493%2FSAMM-YKZ) The most probable delineation of Area hOc3d (Cuneus) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.13] [DOI: 10.25493/Q3ZS-NV6](https://doi.org/10.25493%2FQ3ZS-NV6) Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D)

Kujovic, M., Zilles, K., Malikovic, A., Schleicher, A., Mohlberg, H., Rottschy, C.,… Amunts, K. (2012). Cytoarchitectonic mapping of the human dorsal extrastriate cortex. Brain Structure and Function, 218(1), 157–172.

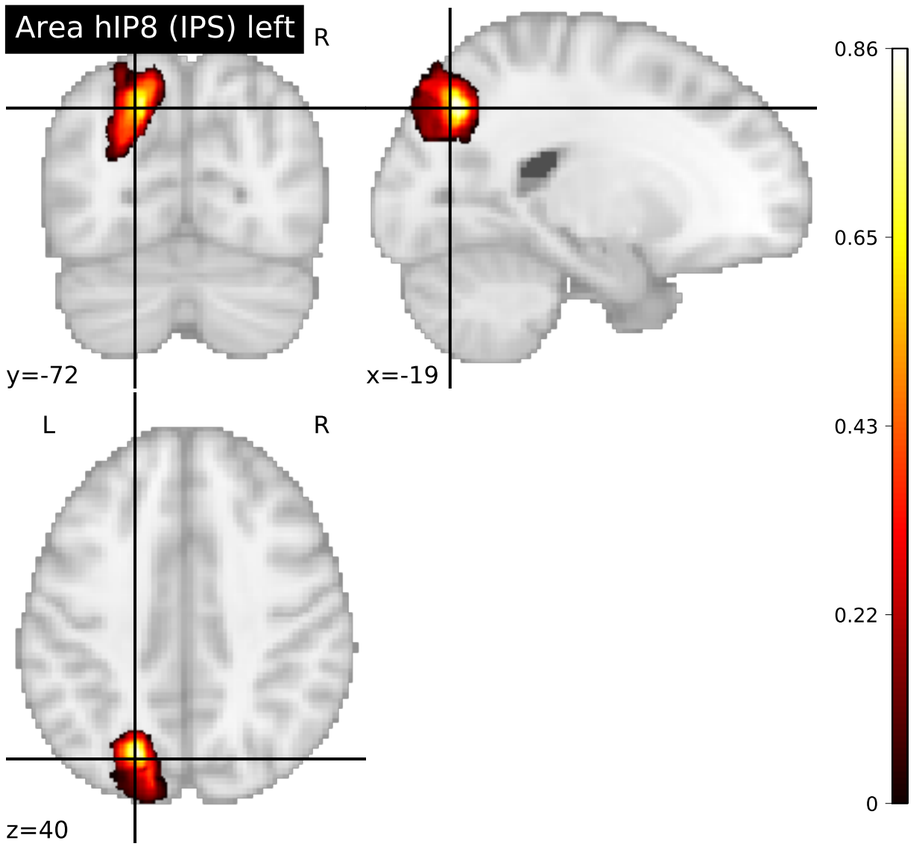


Area hIP8 (IPS)

Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral cortex
        └── parietal lobe
            └── intraparietal sulcus

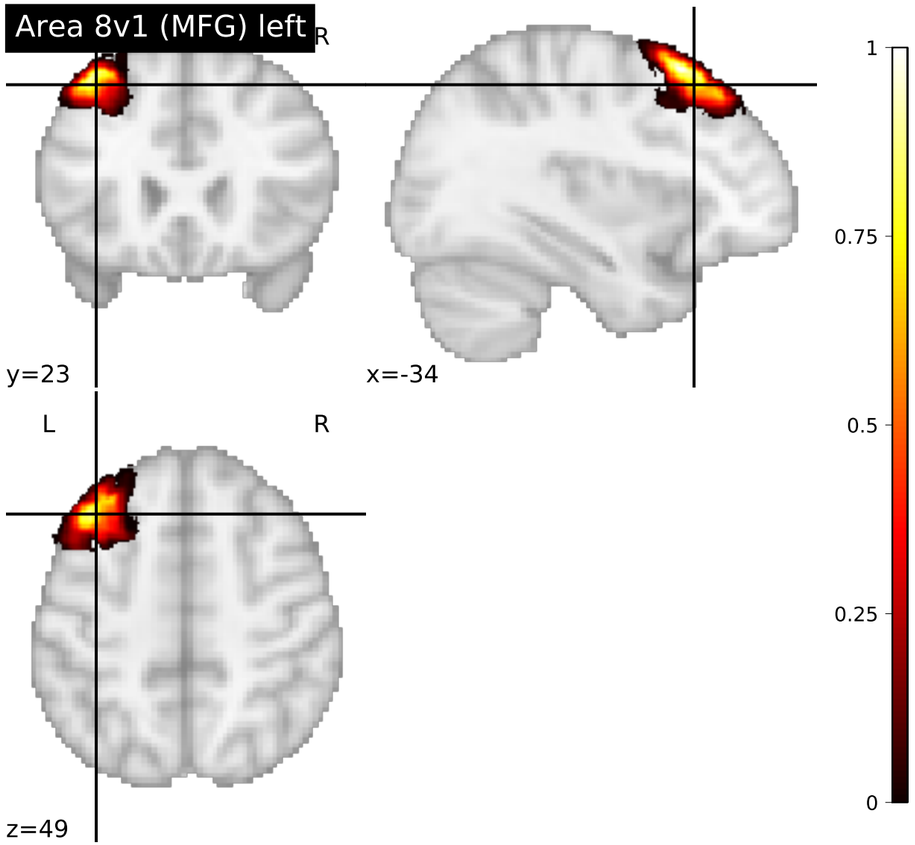
This dataset contains the distinct architectonic Area hIP8 (IPS) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to Area hIP8 (IPS). The probability map of Area hIP8 (IPS) is provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Area hIP8 (IPS): Richter et al. (2019) [Data set, v7.0] [DOI: 10.25493/JBV5-J8J](https://doi.org/10.25493%2FJBV5-J8J) The most probable delineation of Area hIP8 (IPS) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D) Amunts et al. (2020) [Data set, v2.4] [DOI: 10.25493/A7Y0-NX9](https://doi.org/10.25493%2FA7Y0-NX9) Amunts et al. (2020) [Data set, v2.5] [DOI: 10.25493/8JKE-M53](https://doi.org/10.25493/8JKE-M53)

Richter, M., Amunts, K., Mohlberg, H., Bludau, S., Eickhoff, S. B., Zilles, K., Caspers, S. (2018). Cytoarchitectonic segregation of human posterior intraparietal and adjacent parieto-occipital sulcus and its relation to visuomotor and cognitive functions. Cerebral Cortex, 29(3), 1305-1327



Area 8v1 (MFG)

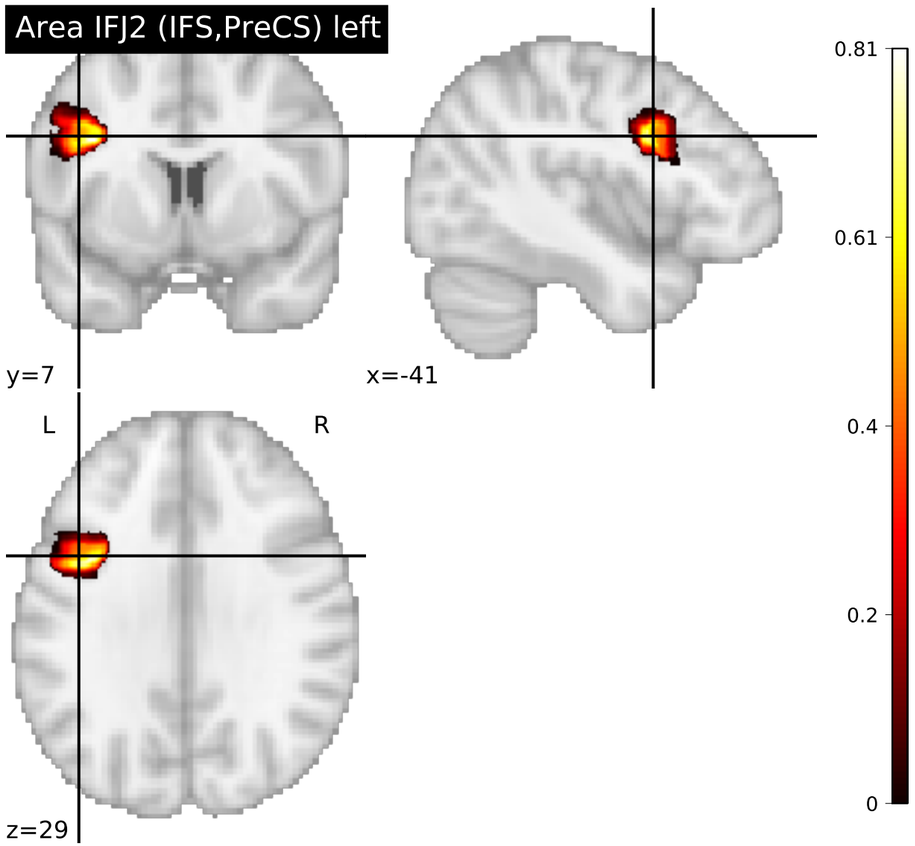
Julich-Brain Cytoarchitectonic Maps 2.9
└ telencephalon
└ cerebral cortex
└ frontal lobe
└ middle frontal gyrus



Area IFJ2 (IFS,PreCS)

Julich-Brain Cytoarchitectonic Maps 2.9
- telencephalon
  - cerebral cortex
    - frontal lobe
      - inferior frontal sulcus

This dataset contains cytoarchitectonic maps of Area ifj2 (IFS/PreCS) in the BigBrain. The mappings were created using cytoarchitectonic criteria applied on digitized histological sections of 1 µm resolution, cut in coronal plane. Areal borders have been detected by an oberserver-independent border definition (Schleicher 2000). Mappings are available on sections of the BigBrain and have been transformed to the 3D reconstructed BigBrain space using the transformations used in Amunts et al. 2013. From these delineations, a preliminary 3D map of Area ifj2 (IFS/PreCS) has been created by simple interpolation of the coronal contours in the 3D anatomical space of the Big Brain. This map gives a first impression of the location of this area in the Big Brain, and can be viewed in the atlas viewer using the URL below.

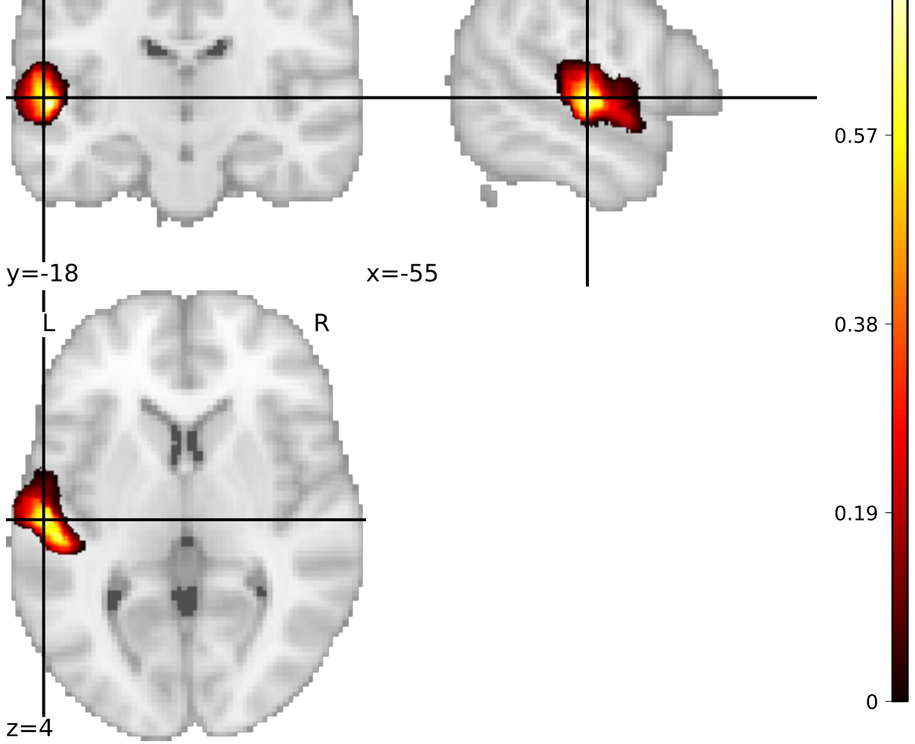


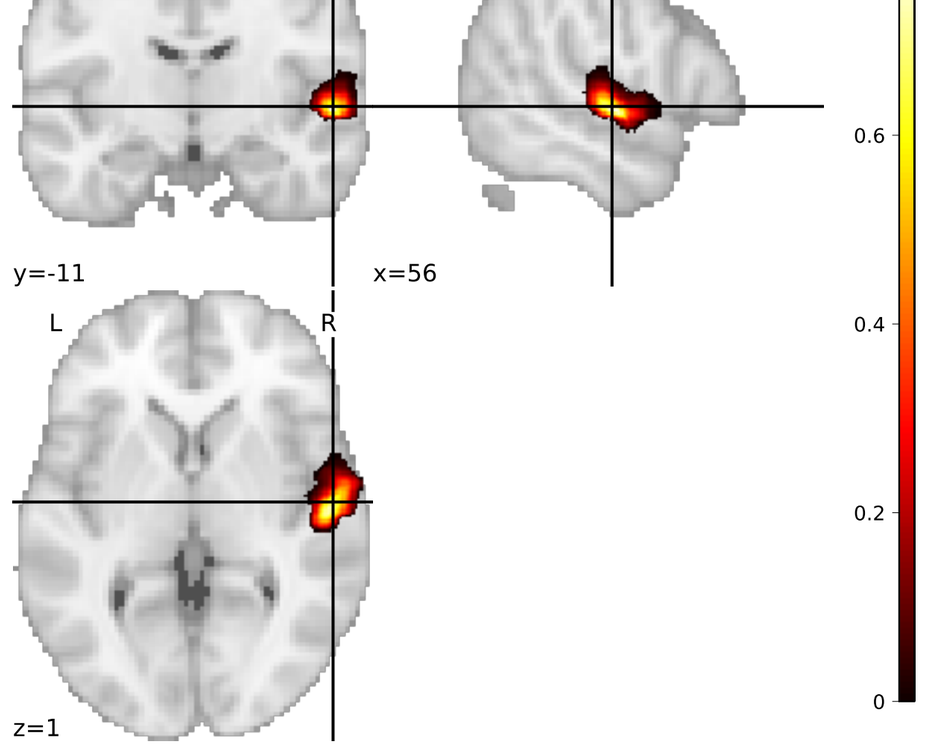
Area TE 2.1 (STG)

Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral cortex
        └── temporal lobe
            └── superior temporal gyrus

This dataset contains the distinct architectonic Area TE 2.1 (STG) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to Area TE 2.1 (STG). The probability map of Area TE 2.1 (STG) is provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. The most probable delineation of Area TE 2.1 (STG) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493/TAKY-64D)

Zachlod, D., Rüttgers, B., Bludau, S., Mohlberg, H., Langner, R., Zilles, K., Amunts, K. (2020) Four new cytoarchitectonic areas surrounding the primary and early auditory cortex in human brains. Cortex, 128:1-29



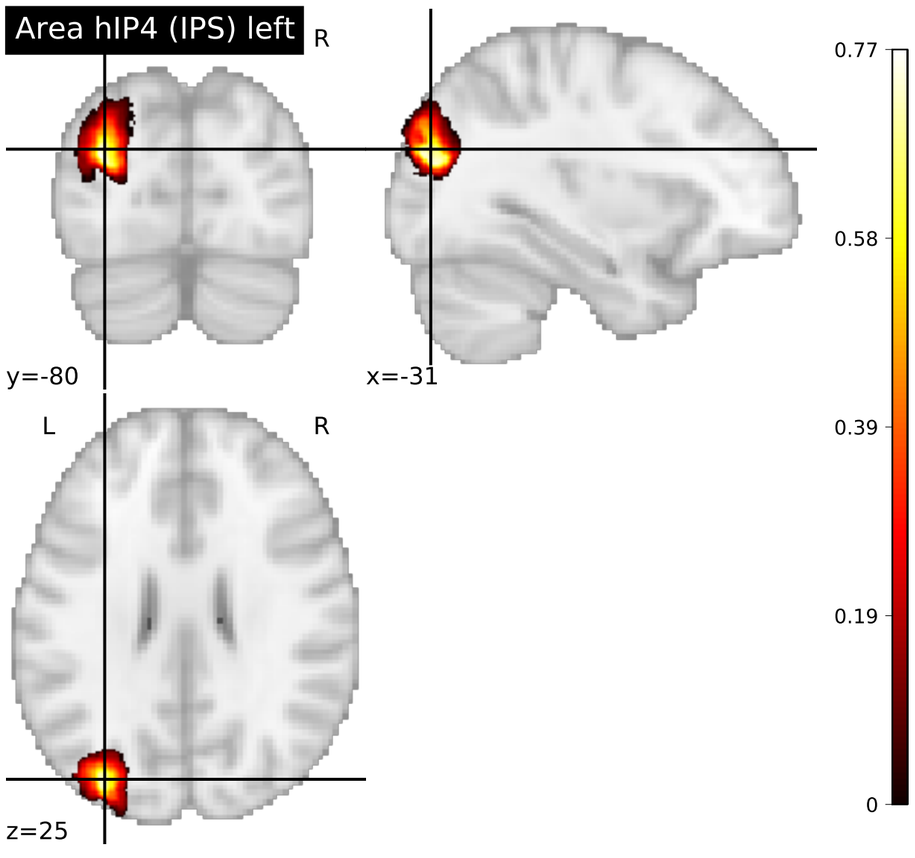


Area hIP4 (IPS)

Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral cortex
        └── parietal lobe
            └── intraparietal sulcus

This dataset contains the distinct architectonic Area hIP4 (IPS) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to Area hIP4 (IPS). The probability map of Area hIP4 (IPS) is provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Area hIP4 (IPS): Richter et al. (2019) [Data set, v7.0] [DOI: 10.25493/DFB3-SPJ](https://doi.org/10.25493%2FDFB3-SPJ) The most probable delineation of Area hIP4 (IPS) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D) Amunts et al. (2020) [Data set, v2.4] [DOI: 10.25493/A7Y0-NX9](https://doi.org/10.25493%2FA7Y0-NX9) Amunts et al. (2020) [Data set, v2.5] [DOI: 10.25493/8JKE-M53](https://doi.org/10.25493/8JKE-M53)

Richter, M., Amunts, K., Mohlberg, H., Bludau, S., Eickhoff, S. B., Zilles, K., Caspers, S. (2018). Cytoarchitectonic segregation of human posterior intraparietal and adjacent parieto-occipital sulcus and its relation to visuomotor and cognitive functions. Cerebral Cortex, 29(3), 1305-1327

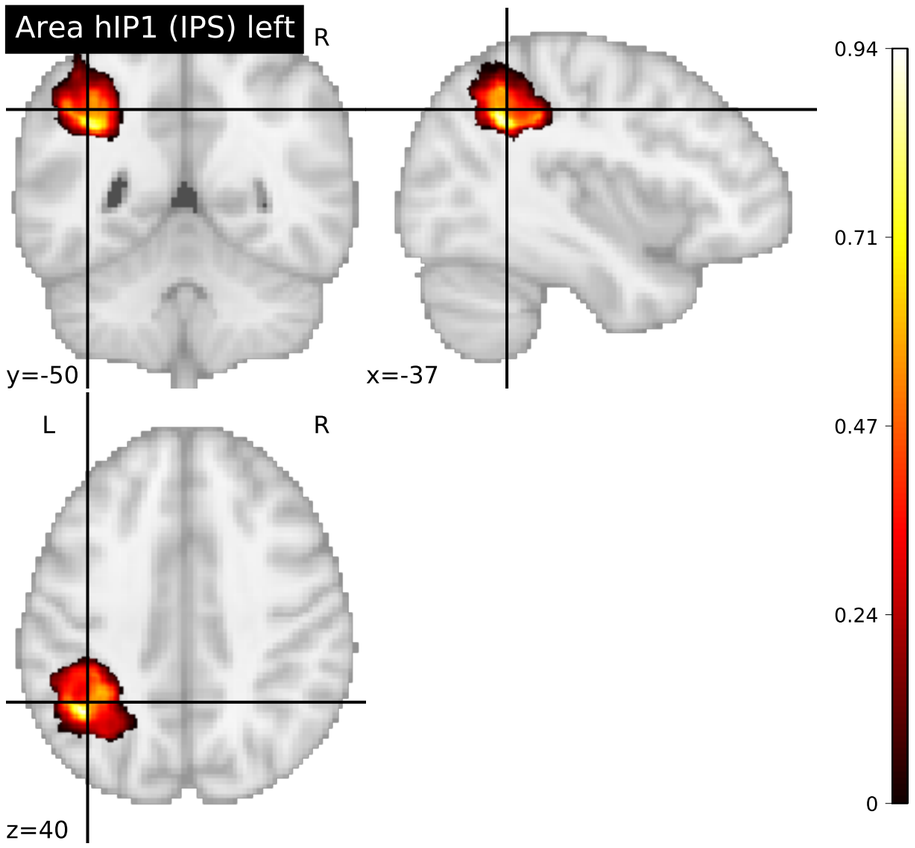


Area hIP1 (IPS)

Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral cortex
        └── parietal lobe
            └── intraparietal sulcus

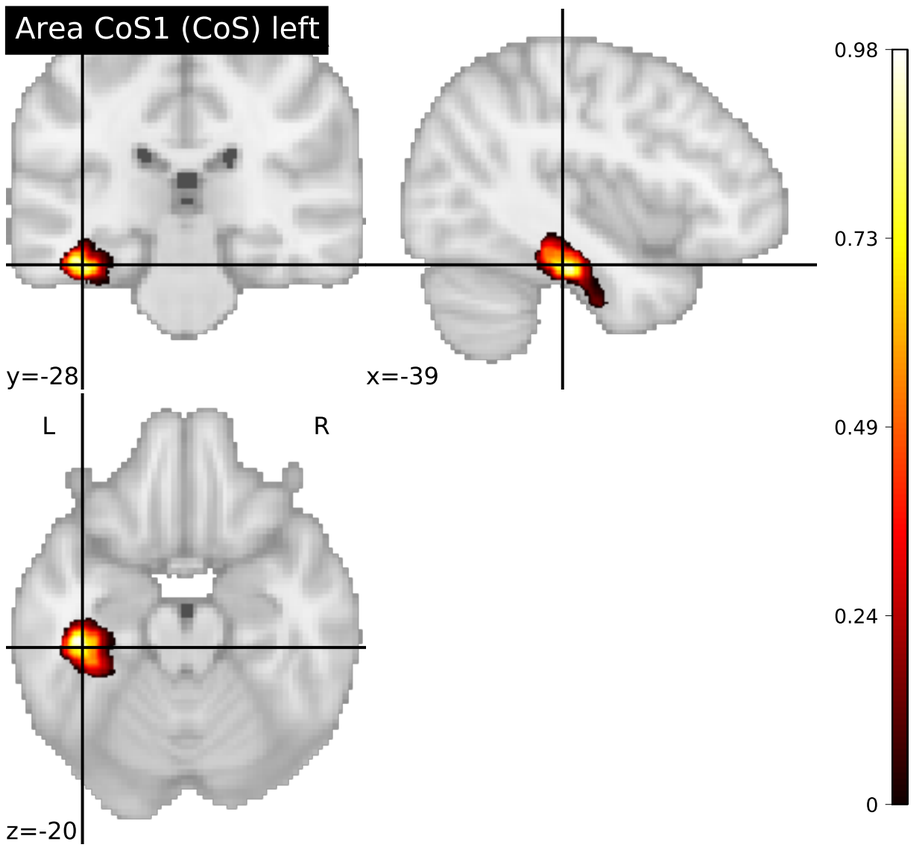
This dataset contains the distinct architectonic Area hIP1 (IPS) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to Area hIP1 (IPS). The probability map of Area hIP1 (IPS) are provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Area hIP1 (IPS): Choi et al. (2018) [Data set, v6.0] [DOI: 10.25493/VWV1-FYY](https://doi.org/10.25493%2FVWV1-FYY) The most probable delineation of Area hIP1 (IPS) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.13] [DOI: 10.25493/Q3ZS-NV6](https://doi.org/10.25493%2FQ3ZS-NV6) Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D)

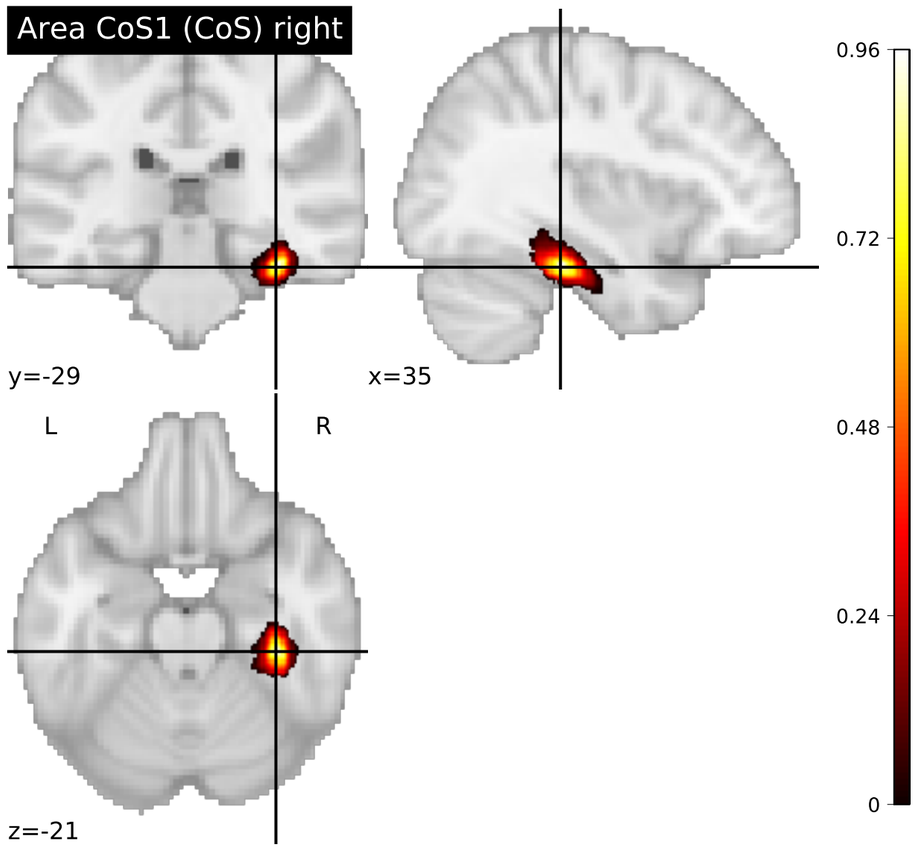
Choi, H.-J., Zilles, K., Mohlberg, H., Schleicher, A., Fink, G. R., Armstrong, E., & Amunts, K. (2006). Cytoarchitectonic identification and probabilistic mapping of two distinct areas within the anterior ventral bank of the human intraparietal sulcus. The Journal of Comparative Neurology, 495(1), 53–69.



Area CoS1 (CoS)

Julich-Brain Cytoarchitectonic Maps 2.9
└─ telencephalon
  └─ cerebral cortex
    └─ temporal lobe
      └─ collateral sulcus





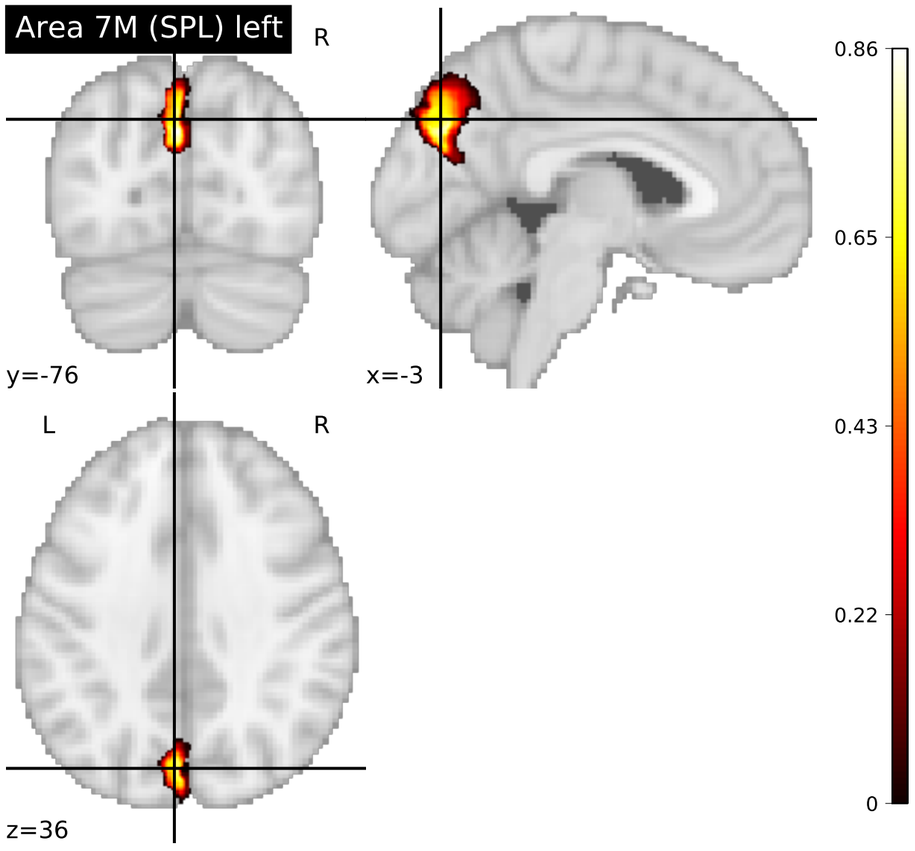
Area 7M (SPL)

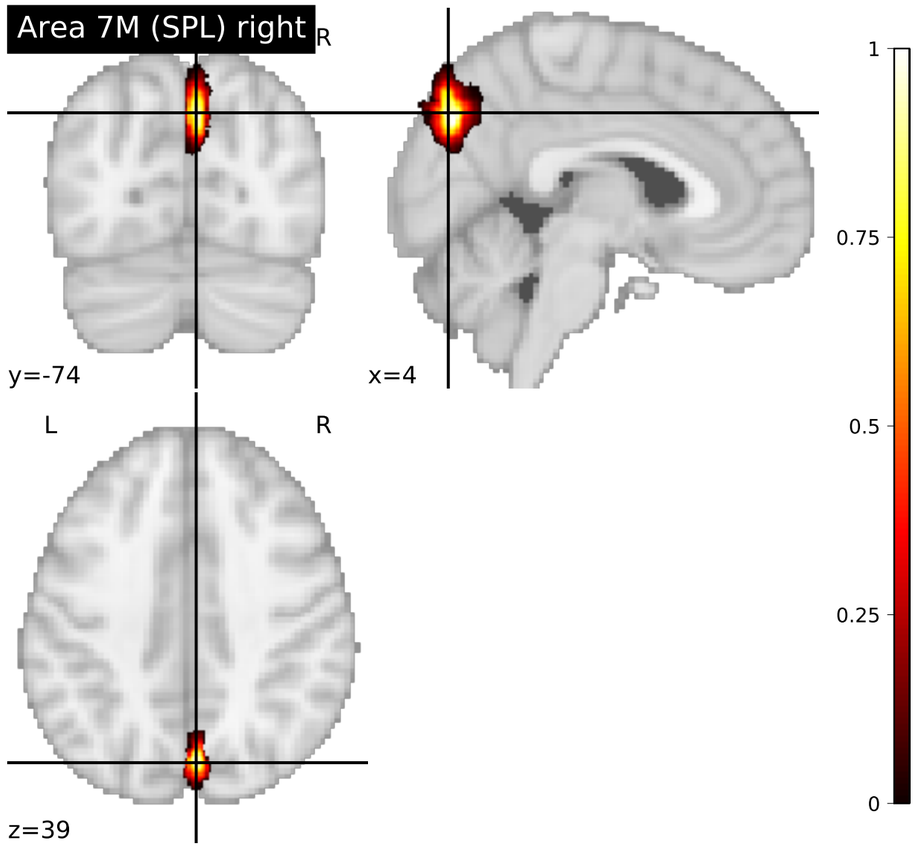
Julich-Brain Cytoarchitectonic Maps 2.9
- telencephalon
  - cerebral cortex
    - parietal lobe
      - superior parietal lobule

This dataset contains the distinct architectonic Area 7M (SPL) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to Area 7M (SPL). The probability map of Area 7M (SPL) are provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Area 7M (SPL): Scheperjans et al. (2018) [Data set, v8.2] [DOI: 10.25493/F26Z-16P](https://doi.org/10.25493%2FF26Z-16P) The most probable delineation of Area 7M (SPL) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.13] [DOI: 10.25493/Q3ZS-NV6](https://doi.org/10.25493%2FQ3ZS-NV6) Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR)

Scheperjans, F., Eickhoff, S. B., Hoemke, L., Mohlberg, H., Hermann, K., Amunts, K., & Zilles, K. (2008). Probabilistic Maps, Morphometry, and Variability of Cytoarchitectonic Areas in the Human Superior Parietal Cortex. Cerebral Cortex, 18(9), 2141–2157.

Scheperjans, F., Hermann, K., Eickhoff, S. B., Amunts, K., Schleicher, A., & Zilles, K. (2007). Observer-Independent Cytoarchitectonic Mapping of the Human Superior Parietal Cortex. Cerebral Cortex, 18(4), 846–867.

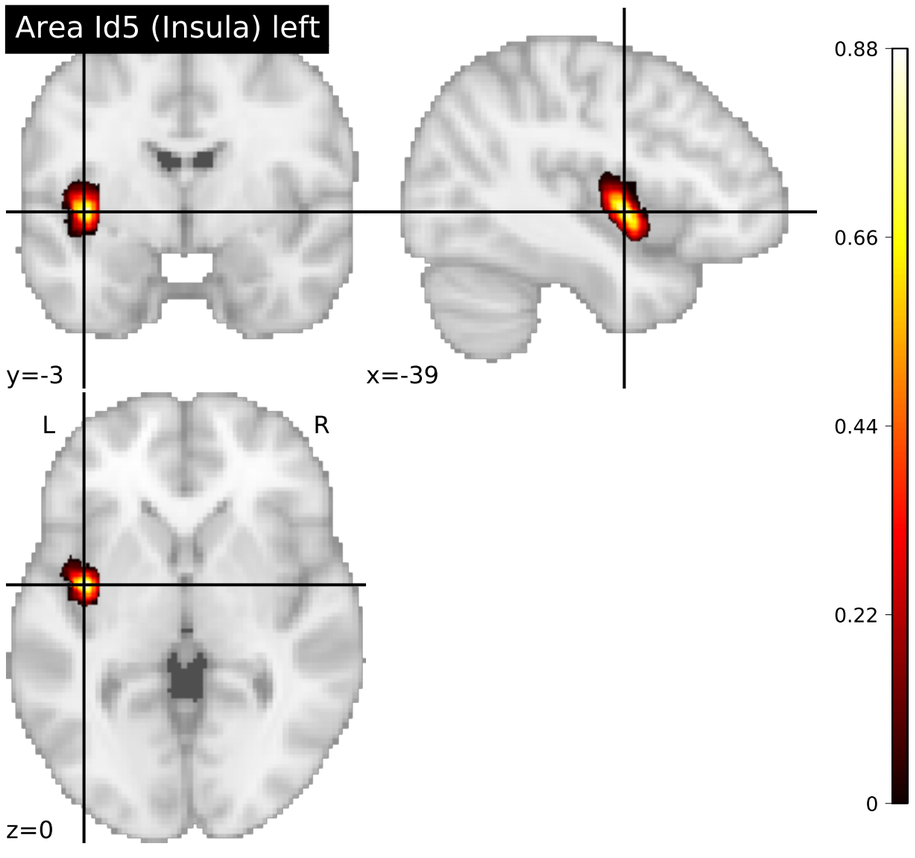


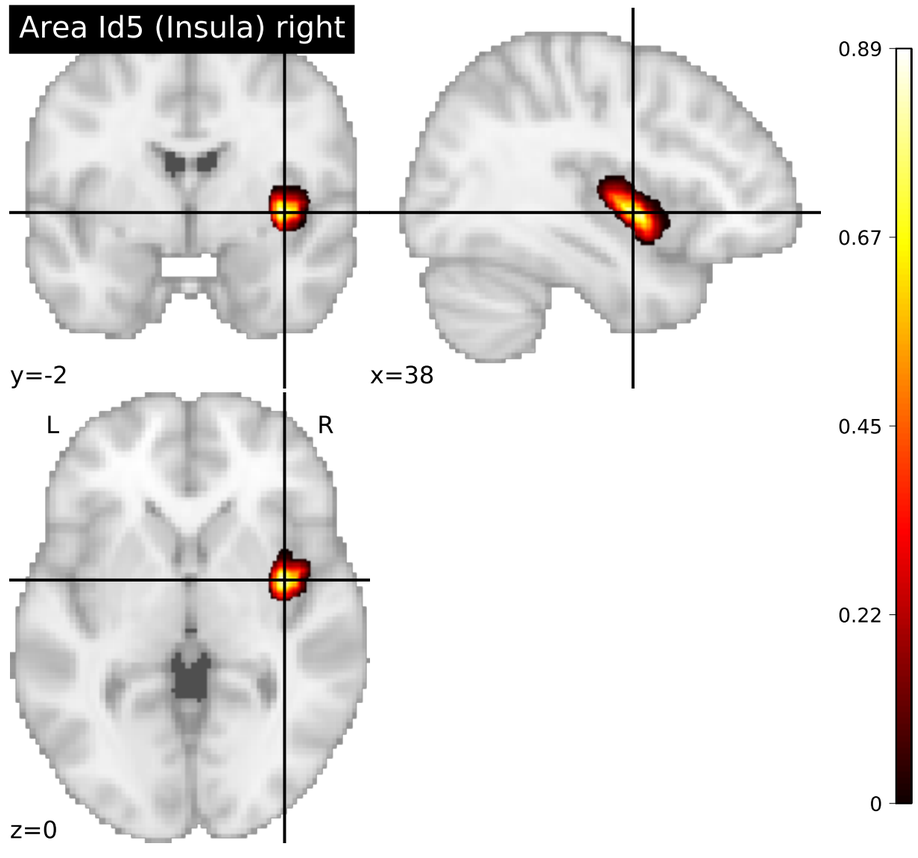


Area Id5 (Insula)

Julich-Brain Cytoarchitectonic Maps 2.9
- telencephalon
  - cerebral cortex
    - insula
      - dysgranular insula

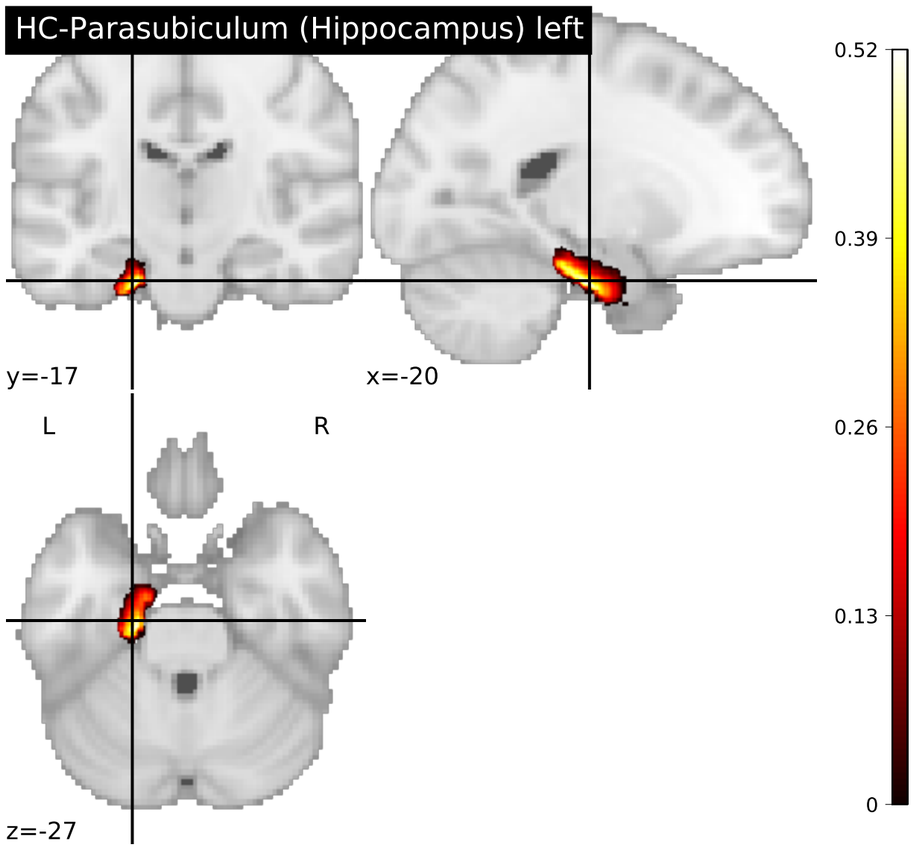
This dataset contains the distinct architectonic Area Id5 (Insula) in the MNI Colin 27 and MNI ICBM 152 reference spaces. As part of the Julich-Brain atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. Subsequently the results of the cytoarchitectonic analysis are mapped to the MNI Colin 27 and MNI ICBM 152 reference spaces where each voxel is assigned with the probability to belong to Area Id5 (Insula). The probability map of Area Id5 (Insula) are provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. The most probable delineation of Area Id5 (Insula) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493/8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493/TAKY-64D)

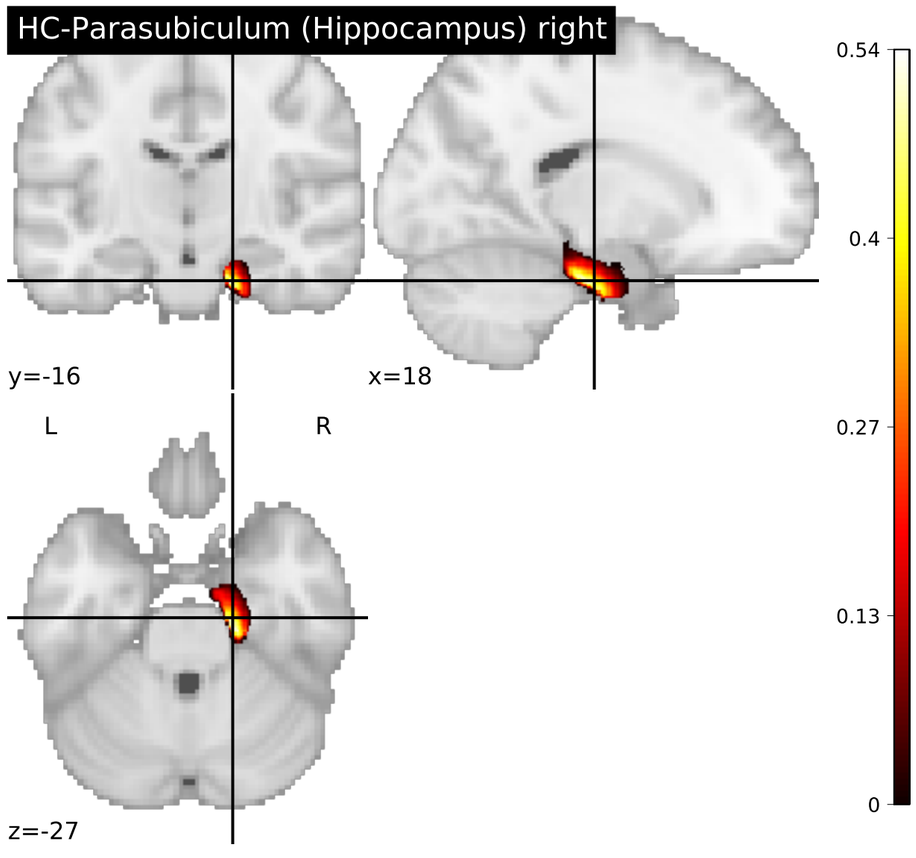




HC-Parasubiculum (Hippocampus)

Julich-Brain Cytoarchitectonic Maps 2.9
└— telencephalon
└— cerebral cortex
└— limbic lobe
└— hippocampal formation

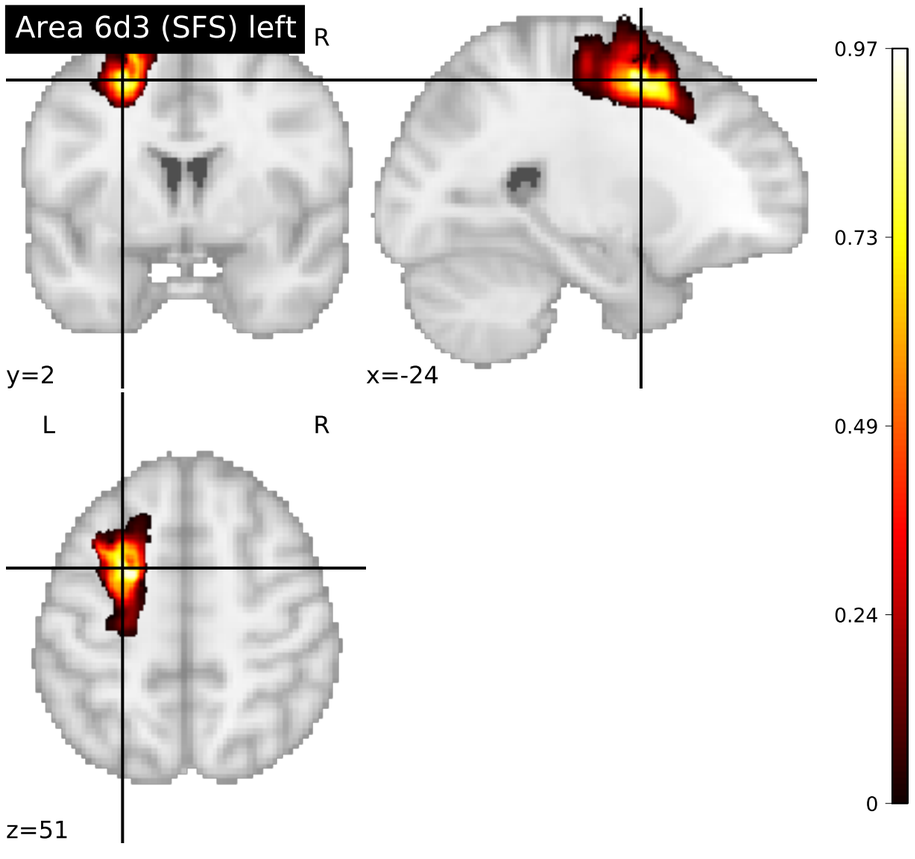


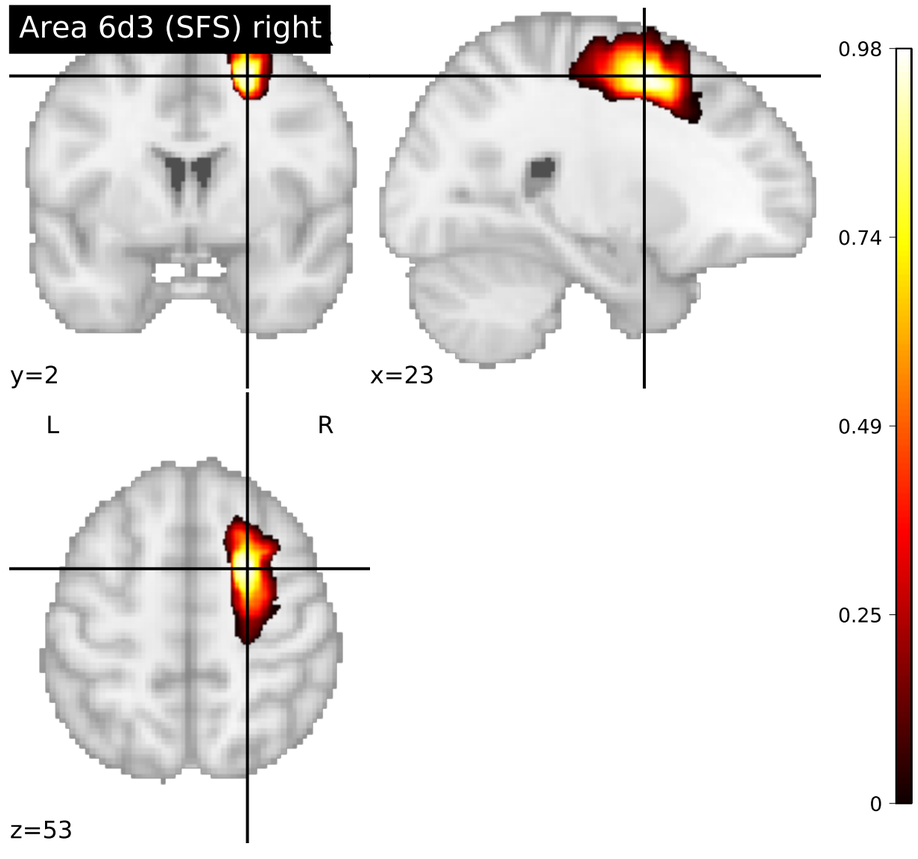


Area 6d3 (SFS)

Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral cortex
        └── frontal lobe
            └── superior frontal sulcus

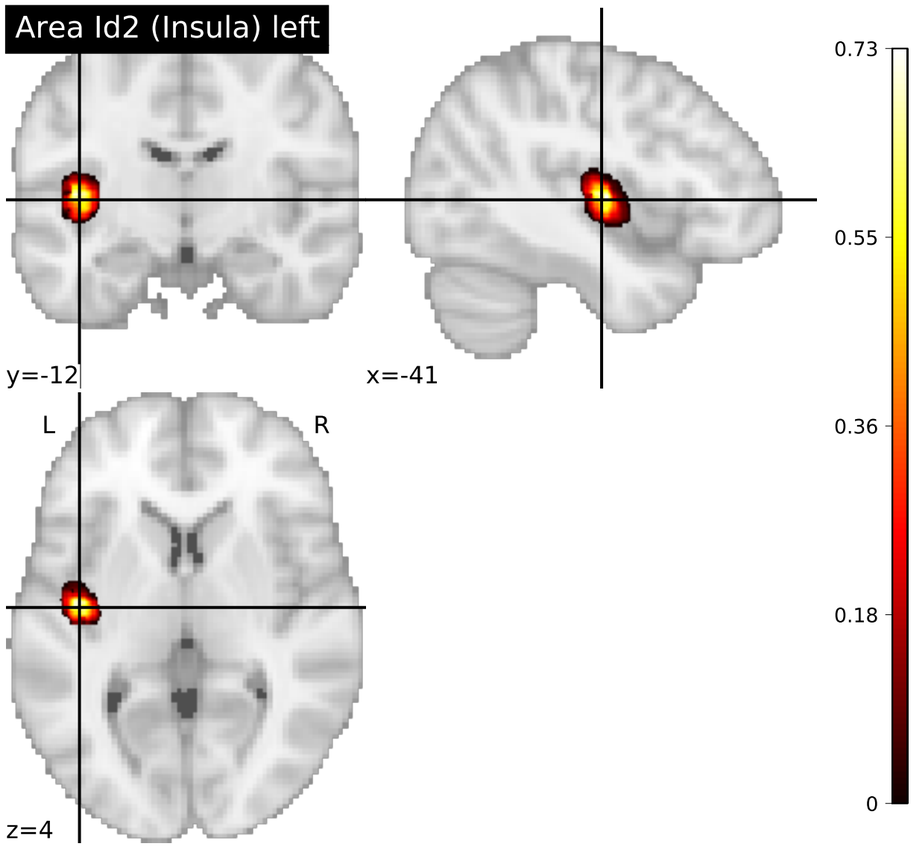
This dataset contains the distinct architectonic Area 6d3 (SFS) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to Area 6d3 (SFS). The probability map of Area 6d3 (SFS) are provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Area 6d3 (SFS): Sigl et al. (2019) [Data set, v4.0] [DOI: 10.25493/40J8-TAK](https://doi.org/10.25493%2F40J8-TAK) The most probable delineation of Area 6d3 (SFS) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.13] [DOI: 10.25493/Q3ZS-NV6](https://doi.org/10.25493%2FQ3ZS-NV6) Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D)

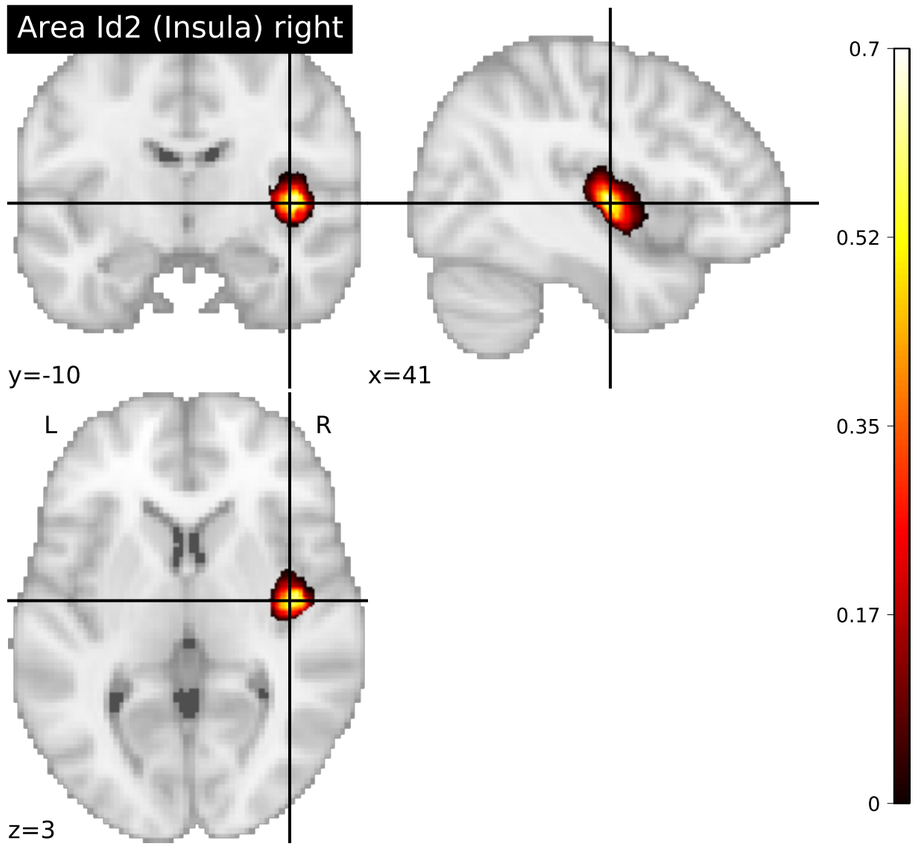




Area Id2 (Insula)

Julich-Brain Cytoarchitectonic Maps 2.9
└─ telencephalon
  └─ cerebral cortex
    └─ insula
      └─ dysgranular insula



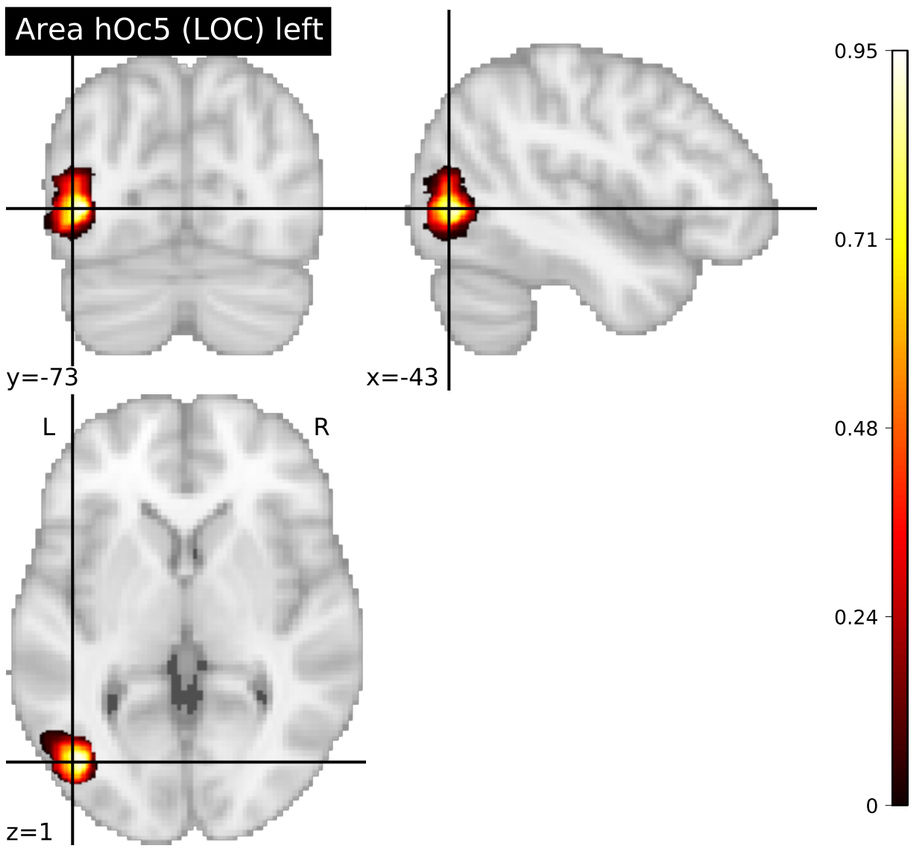


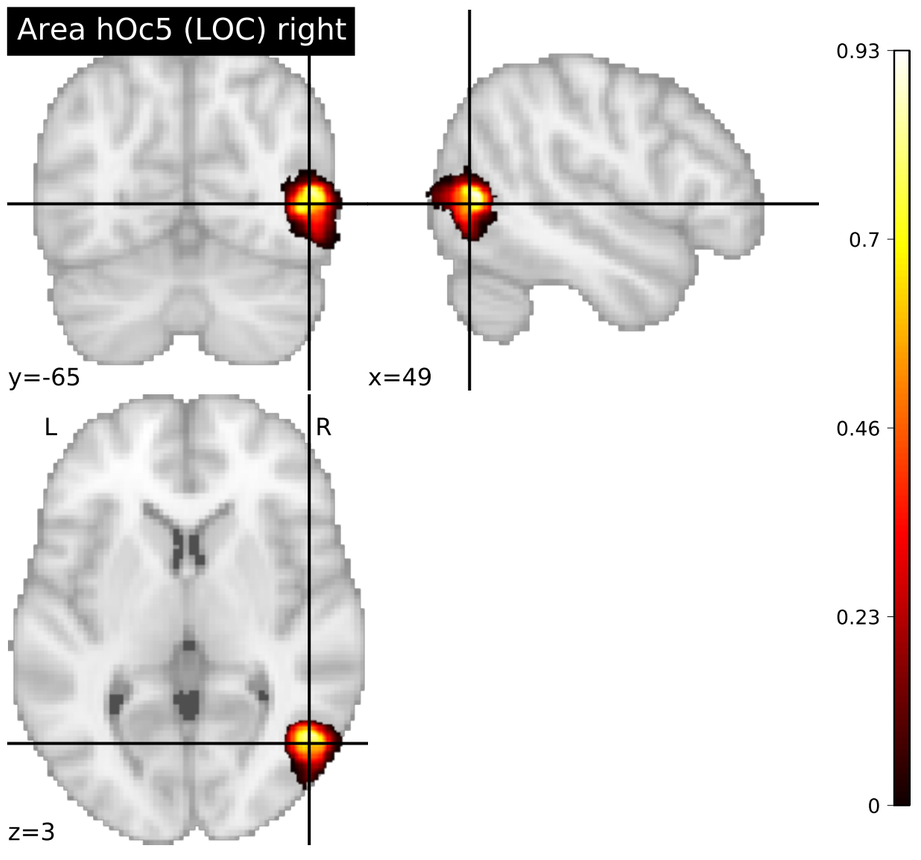
Area hOc5 (LOC)

Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
  └── cerebral cortex
    └── occiptal lobe
      └── lateral occipital cortex

This dataset contains the distinct architectonic Area hOc5 (LOC) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to Area hOc5 (LOC). The probability map of Area hOc5 (LOC) is provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Area hOc5 (LOC): Malikovic et al. (2018) [Data set, v2.2] [DOI: 10.25493/BPG7-360](https://doi.org/10.25493%2FBPG7-360) The most probable delineation of Area hOc5 (LOC) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.13] [DOI: 10.25493/Q3ZS-NV6](https://doi.org/10.25493%2FQ3ZS-NV6) Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D)

Malikovic, A., Amunts, K., Schleicher, A., Mohlberg, H., Eickhoff, S. B., Wilms, M., … Zilles, K. (2006). Cytoarchitectonic Analysis of the Human Extrastriate Cortex in the Region of V5/MT+: A Probabilistic, Stereotaxic Map of Area hOc5. Cerebral Cortex, 17(3), 562–574.



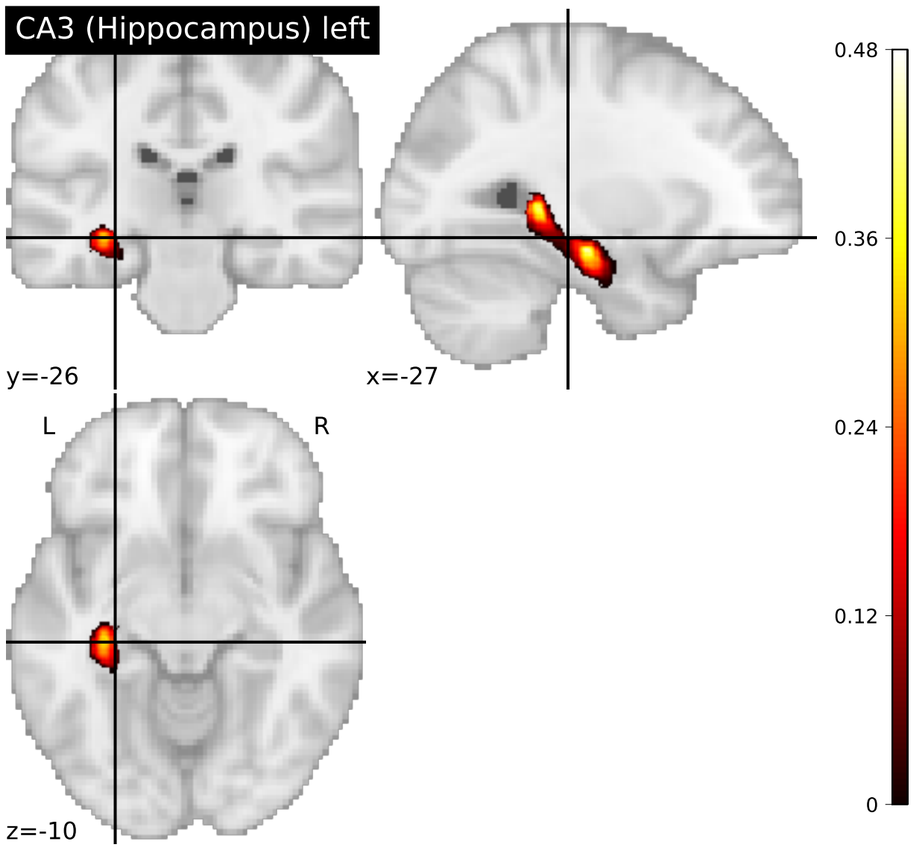


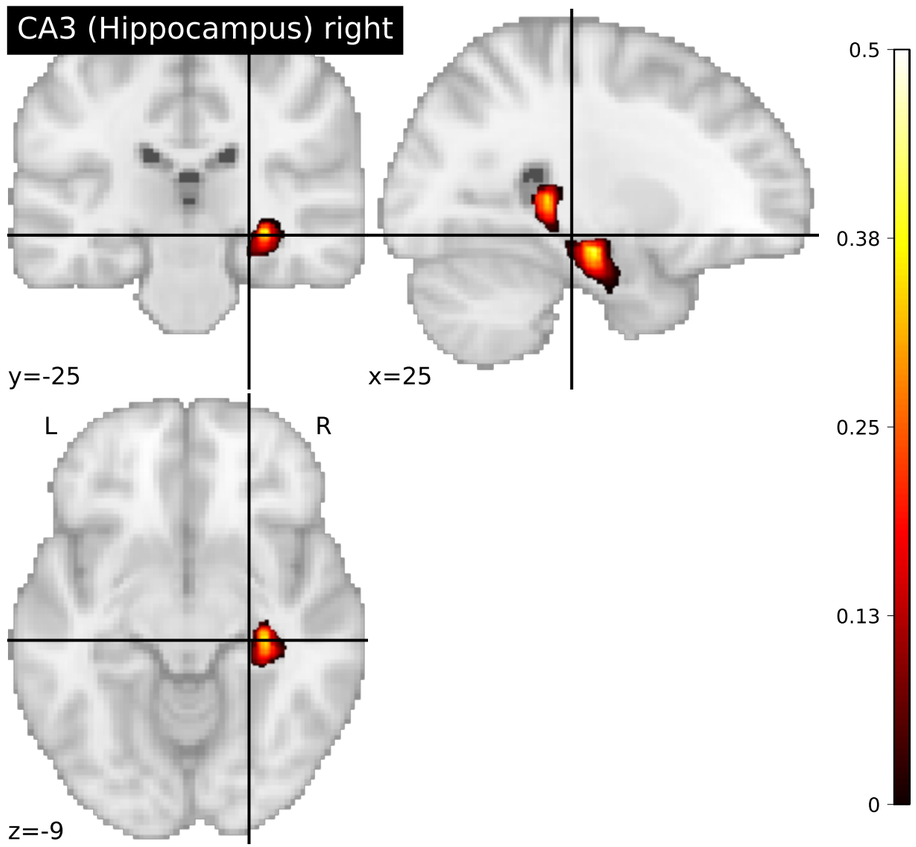
CA3 (Hippocampus)

Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral cortex
        └── limbic lobe
            └── hippocampal formation

This dataset contains the distinct probabilistic cytoarchitectonic map of CA3 (Hippocampus) in the individual, single subject template of the MNI Colin 27 reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using classical histological criteria and quantitative cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to the reference space, where each voxel was assigned the probability to belong to CA3 (Hippocampus). The probability map of CA3 (Hippocampus) is provided in NifTi format for each hemisphere in the reference space. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and updated probability estimates for new brain structures may in some cases lead to measurable but negligible deviations of existing probability maps, as compared to earlier released datasets. Other available data versions of CA3 (Hippocampus): Amunts et al. (2020) [Data set, v11b.0] [DOI: 10.25493/MQ0Y-22E](https://doi.org/10.25493/MQ0Y-22E) The most probable delineation of CA3 (Hippocampus) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.13] [DOI: 10.25493/Q3ZS-NV6](https://doi.org/10.25493%2FQ3ZS-NV6) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493/TAKY-64D) Amunts et al. (2020) [Data set, v2.4] [DOI: 10.25493/A7Y0-NX9](https://doi.org/10.25493%2FA7Y0-NX9)

Palomero-Gallagher, N., Kedo, O., Mohlberg, H., Zilles, K., Amunts, K. (2020) Multimodal mapping and analysis of the cyto- and receptorarchitecture of the human hippocampus. Brain Struct Funct., 225(3):881-907.



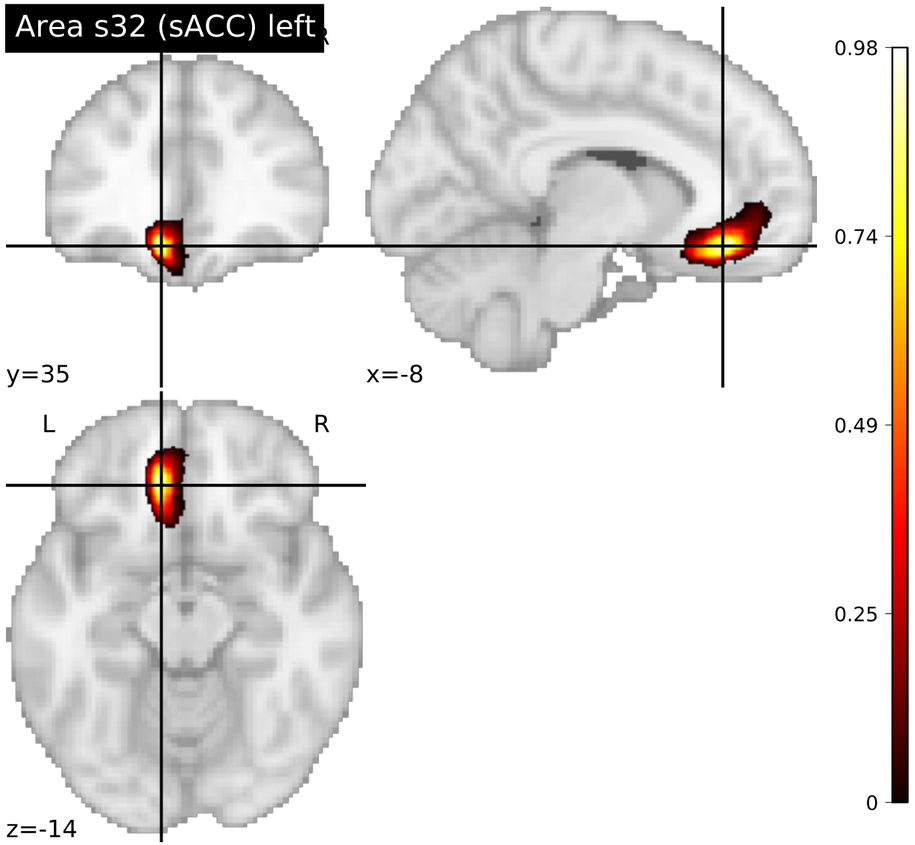


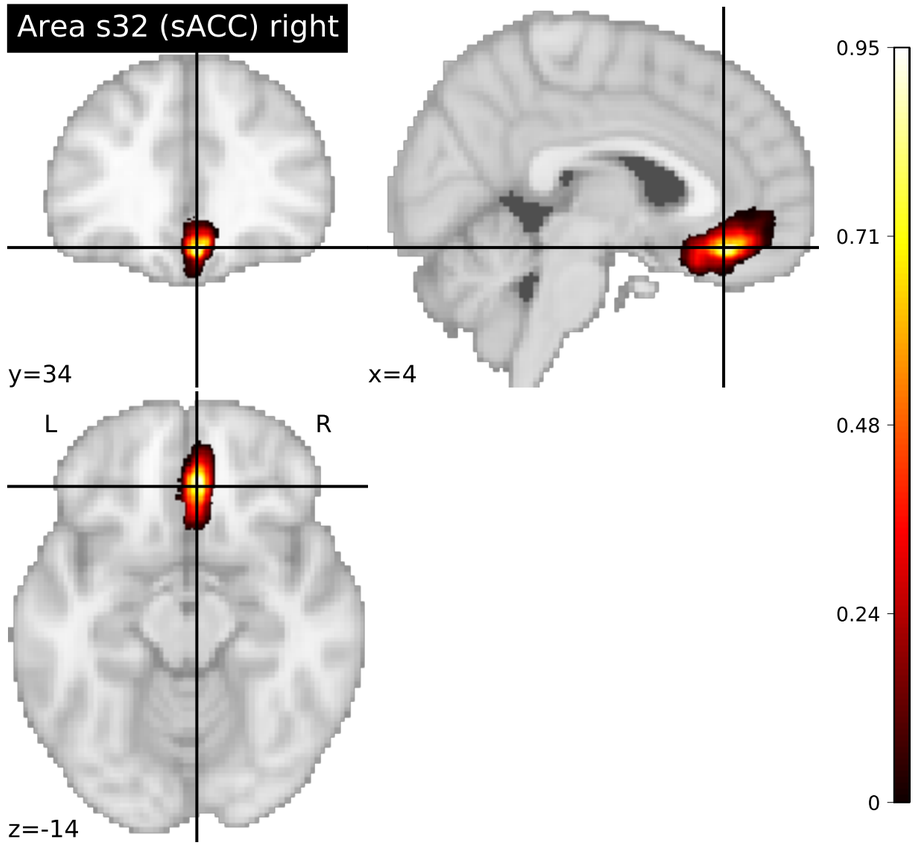
Area s32 (sACC)

Julich-Brain Cytoarchitectonic Maps 2.9
- telencephalon
  - cerebral cortex
    - limbic lobe
      - cingulate gyrus, frontal part

This dataset contains the distinct architectonic Area s32 (sACC) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to Area s32 (sACC). The probability map of Area s32 (sACC) is provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Area s32 (sACC): Palomero-Gallagher et al. (2018) [Data set, v16.0] [DOI: 10.25493/3PBV-WH0](https://doi.org/10.25493%2F3PBV-WH0) The most probable delineation of Area s32 (sACC) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.13] [DOI: 10.25493/Q3ZS-NV6](https://doi.org/10.25493%2FQ3ZS-NV6) Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D)

Palomero-Gallagher, N., Eickhoff, S. B., Hoffstaedter, F., Schleicher, A., Mohlberg, H., Vogt, B. A.,... Zilles, K. (2015). Functional organization of human subgenual cortical areas: Relationship between architectonical segregation and connectional heterogeneity. NeuroImage, 115, 177-190.





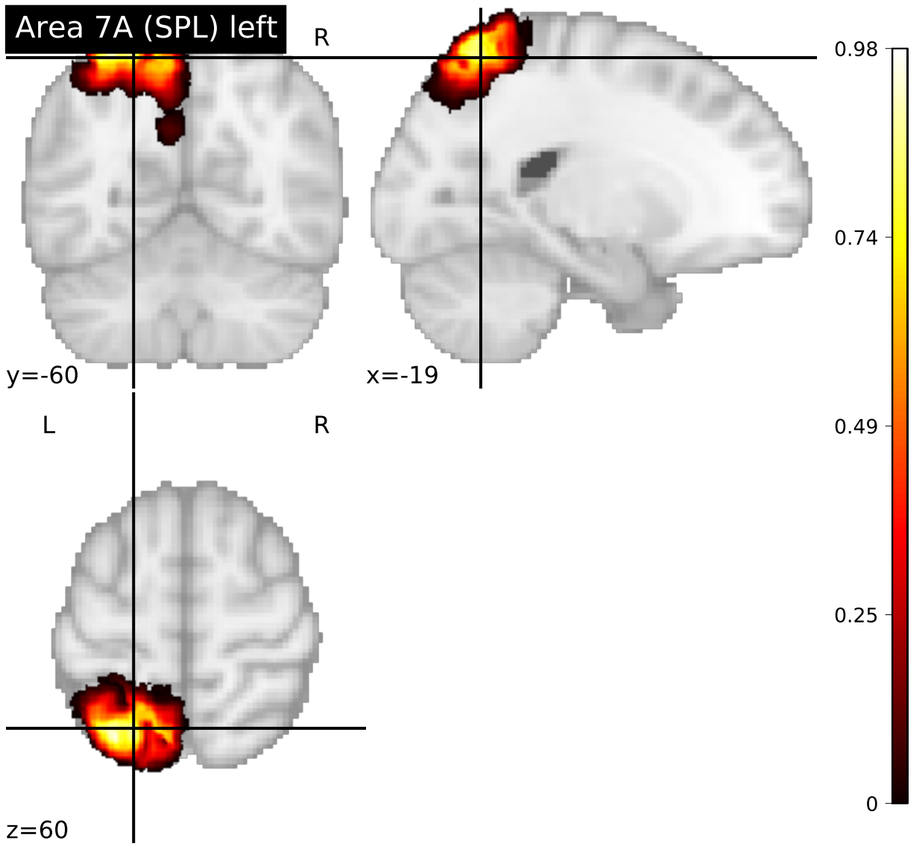
Area 7A (SPL)

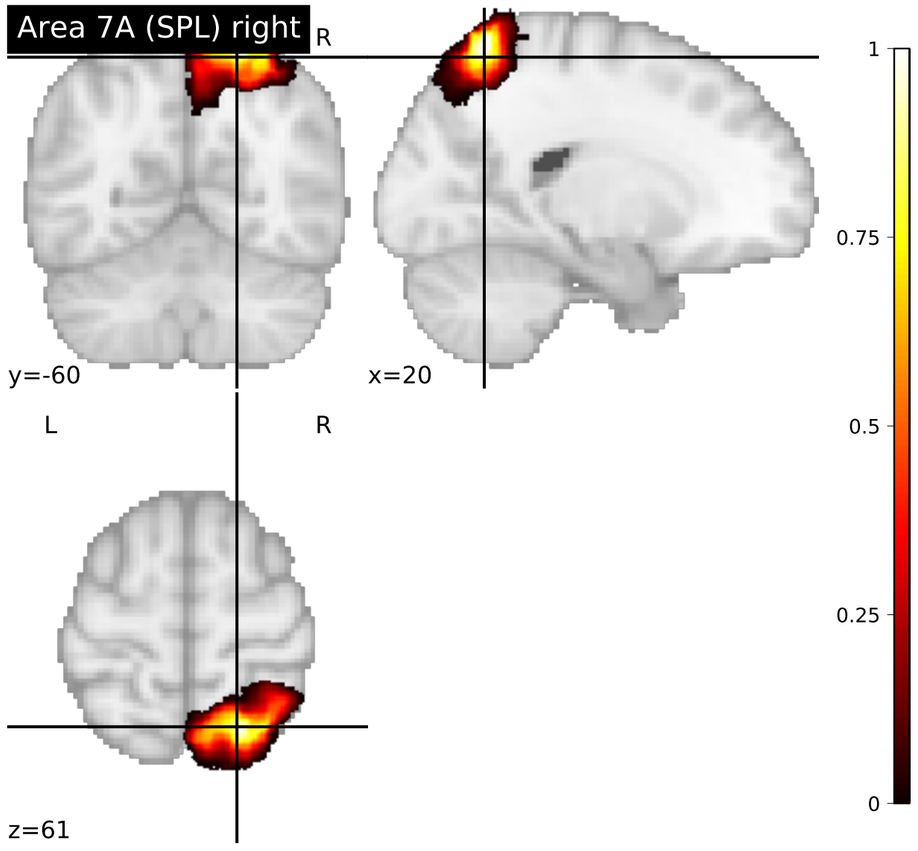
Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral cortex
        └── parietal lobe
            └── superior parietal lobule

This dataset contains the distinct architectonic Area 7A (SPL) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to Area 7A (SPL). The probability map of Area 7A (SPL) are provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Area 7A (SPL): Scheperjans et al. (2018) [Data set, v8.2] [DOI: 10.25493/MQ4V-YRR](https://doi.org/10.25493%2FMQ4V-YRR) The most probable delineation of Area 7A (SPL) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.13] [DOI: 10.25493/Q3ZS-NV6](https://doi.org/10.25493%2FQ3ZS-NV6) Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D)

Scheperjans, F., Eickhoff, S. B., Hoemke, L., Mohlberg, H., Hermann, K., Amunts, K., & Zilles, K. (2008). Probabilistic Maps, Morphometry, and Variability of Cytoarchitectonic Areas in the Human Superior Parietal Cortex. Cerebral Cortex, 18(9), 2141–2157.

Scheperjans, F., Hermann, K., Eickhoff, S. B., Amunts, K., Schleicher, A., & Zilles, K. (2007). Observer-Independent Cytoarchitectonic Mapping of the Human Superior Parietal Cortex. Cerebral Cortex, 18(4), 846–867.



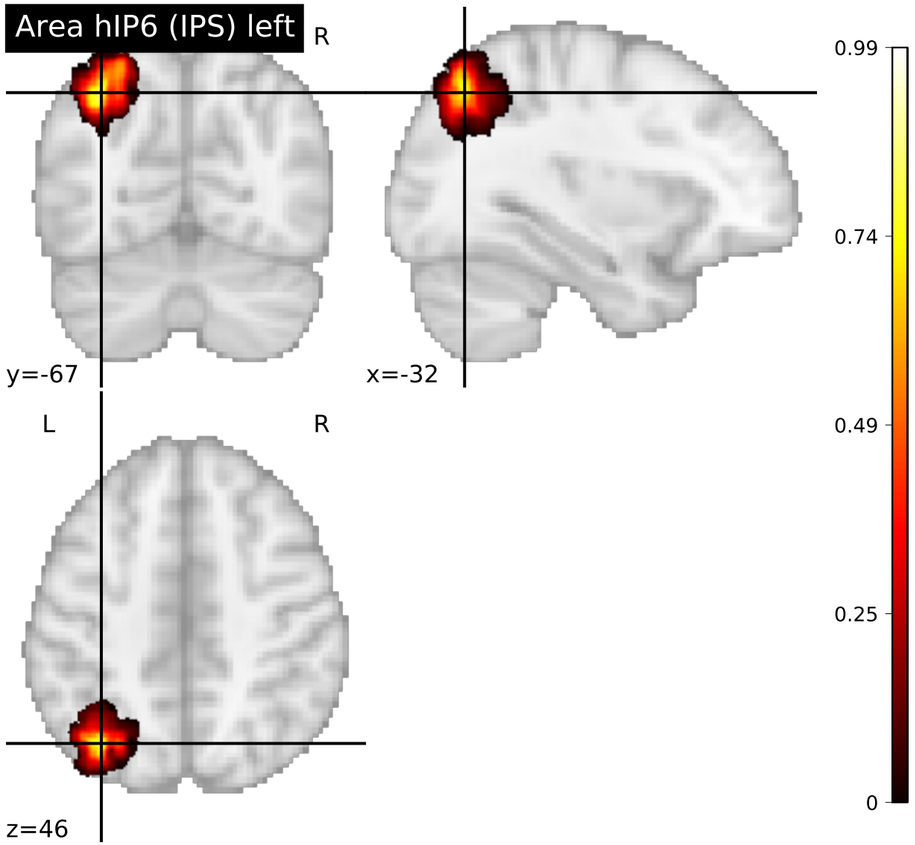


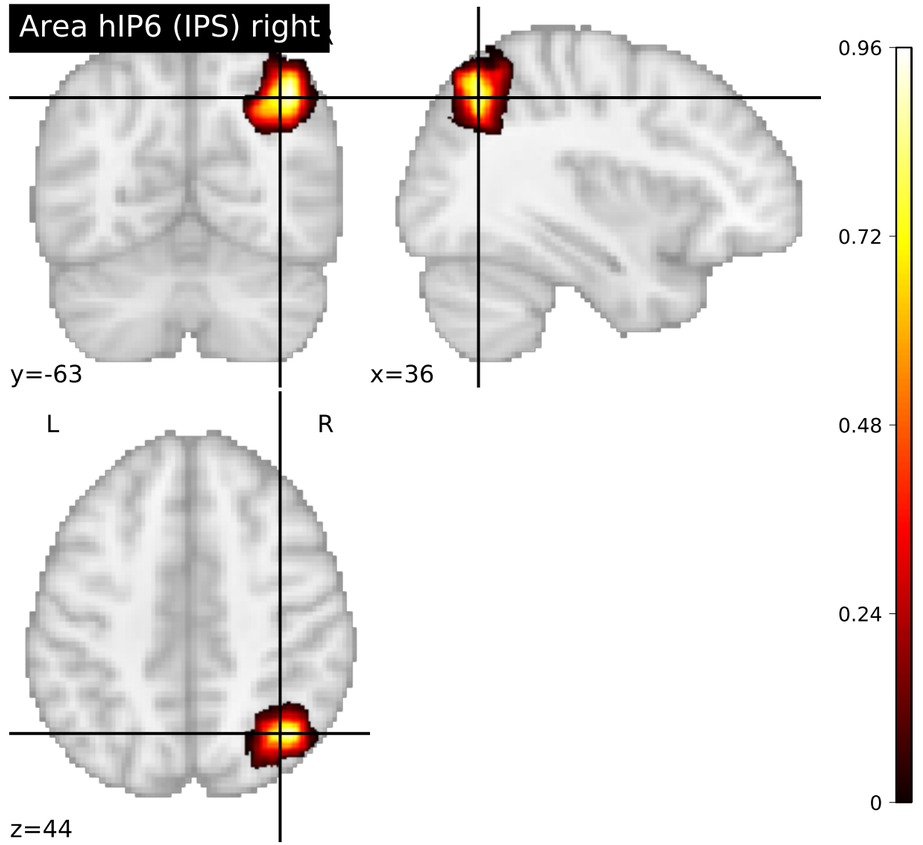
Area hIP6 (IPS)

Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral cortex
        └── parietal lobe
            └── intraparietal sulcus

This dataset contains the distinct architectonic Area hIP6 (IPS) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to Area hIP6 (IPS). The probability map of Area hIP6 (IPS) is provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Area hIP6 (IPS): Richter et al. (2019) [Data set, v7.0] [DOI: 10.25493/SVEY-ZBS](https://doi.org/10.25493%2FSVEY-ZBS) The most probable delineation of Area hIP6 (IPS) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D) Amunts et al. (2020) [Data set, v2.4] [DOI: 10.25493/A7Y0-NX9](https://doi.org/10.25493%2FA7Y0-NX9) Amunts et al. (2020) [Data set, v2.5] [DOI: 10.25493/8JKE-M53](https://doi.org/10.25493/8JKE-M53)

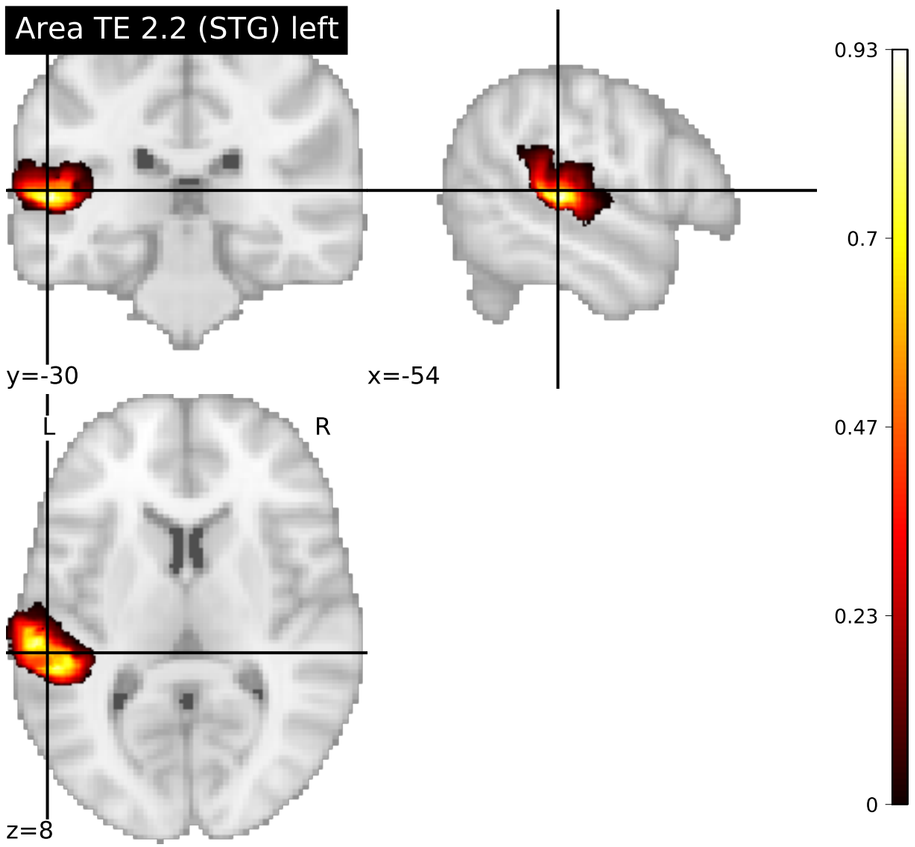
Richter, M., Amunts, K., Mohlberg, H., Bludau, S., Eickhoff, S. B., Zilles, K., Caspers, S. (2018). Cytoarchitectonic segregation of human posterior intraparietal and adjacent parieto-occipital sulcus and its relation to visuomotor and cognitive functions. Cerebral Cortex, 29(3), 1305-1327

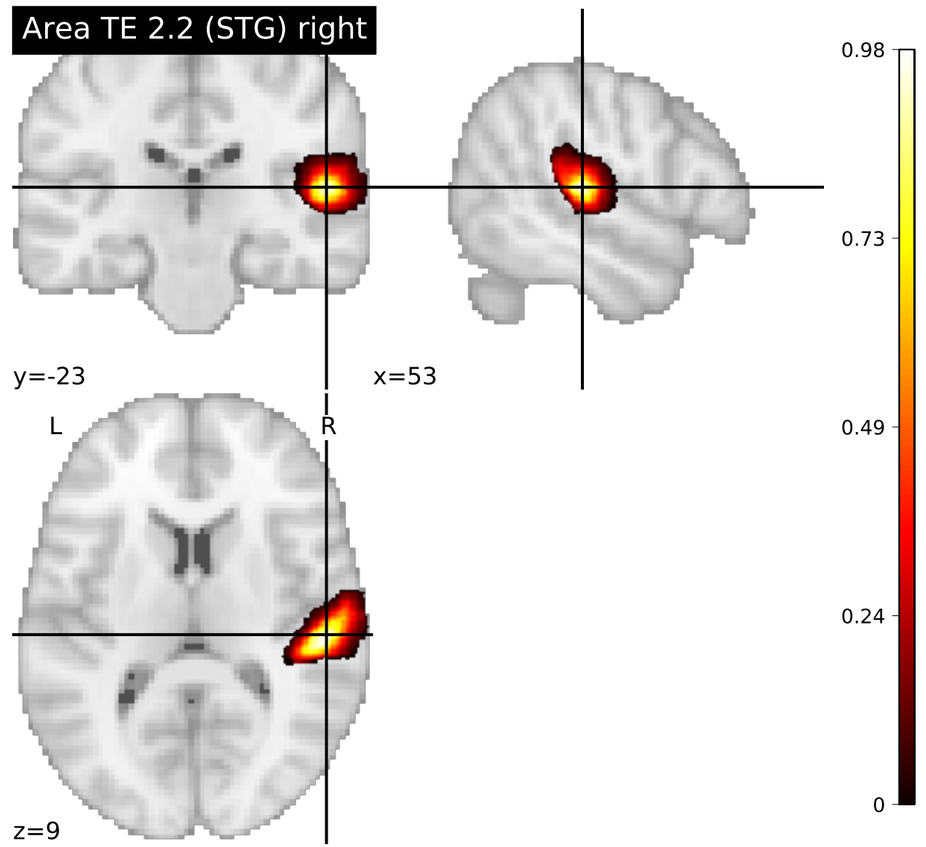




Area TE 2.2 (STG)

Julich-Brain Cytoarchitectonic Maps 2.9
└ telencephalon
  └ cerebral cortex
    └ temporal lobe
      └ superior temporal gyrus



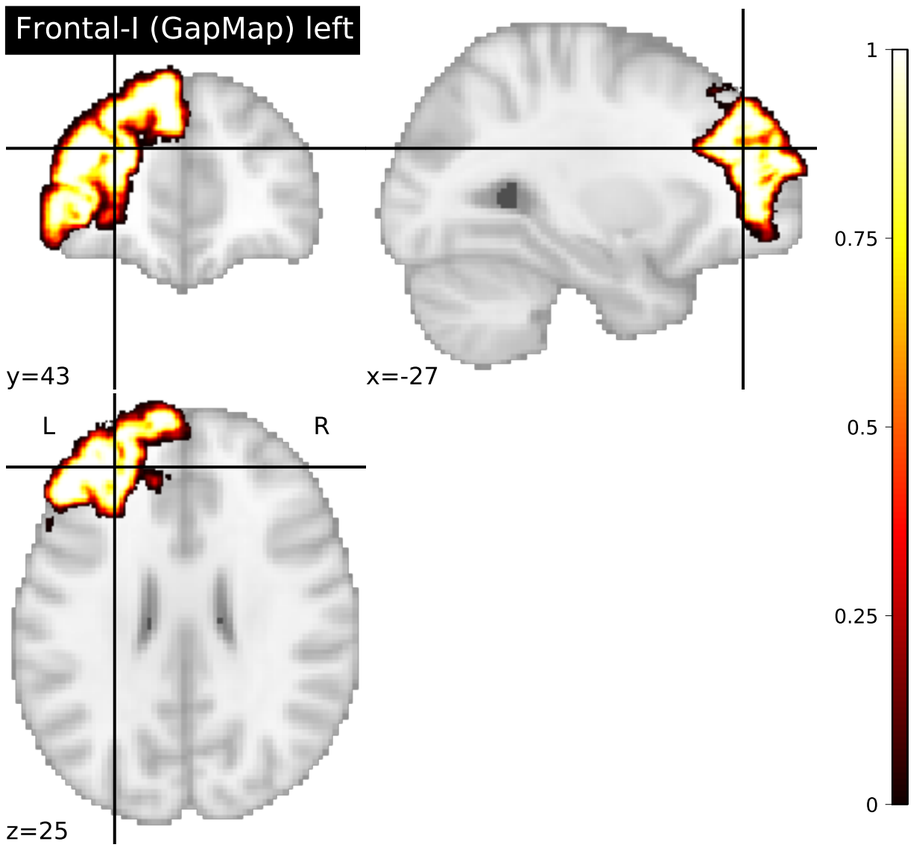


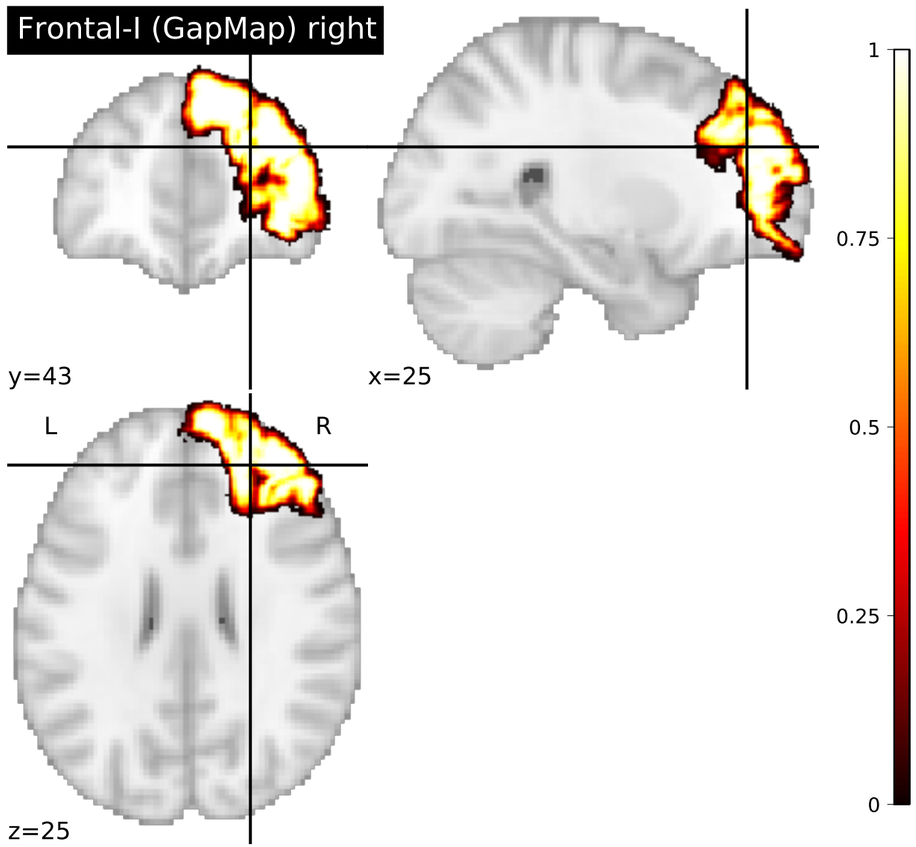
Frontal-I (GapMap)

Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral cortex
        └── overall
            └── overall

This dataset contains the “Gap Map Frontal I” in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. In order to provide whole-brain coverage for the cortex within the Julich-Brain Atlas, yet uncharted parts of the frontal cortex have been combined to the brain region “Gap Map Frontal I”. The distributions were modeled so that probabilistic gap maps were computed in analogy to other maps of the Julich-Brain Atlas. The probabilistic map of “Gap Map Frontal I” is provided in NifTi format for each hemisphere in the reference space. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. New maps are continuously replacing parts of “Gap Map Frontal I” with progress in mapping. Other available data versions of Gap Map Frontal I: Amunts et al. (2020) [Data set, v9.0] [DOI: 10.25493/N6EZ-BRK](https://doi.org/10.25493%2FN6EZ-BRK) Amunts et al. (2020) [Data set, v9.1] [DOI: 10.25493/DQNE-MV3](https://doi.org/10.25493%2FDQNE-MV3) The most probable delineation of Gap Map Frontal I derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493/TAKY-64D) Amunts et al. (2020) [Data set, v2.4] [DOI: 10.25493/A7Y0-NX9](https://doi.org/10.25493%2FA7Y0-NX9)

Amunts, K., Mohlberg, H., Bludau, S., Zilles, K. (2020). Julich-Brain – A 3D probabilistic atlas of human brain’s cytoarchitecture. Science 369, 988-992



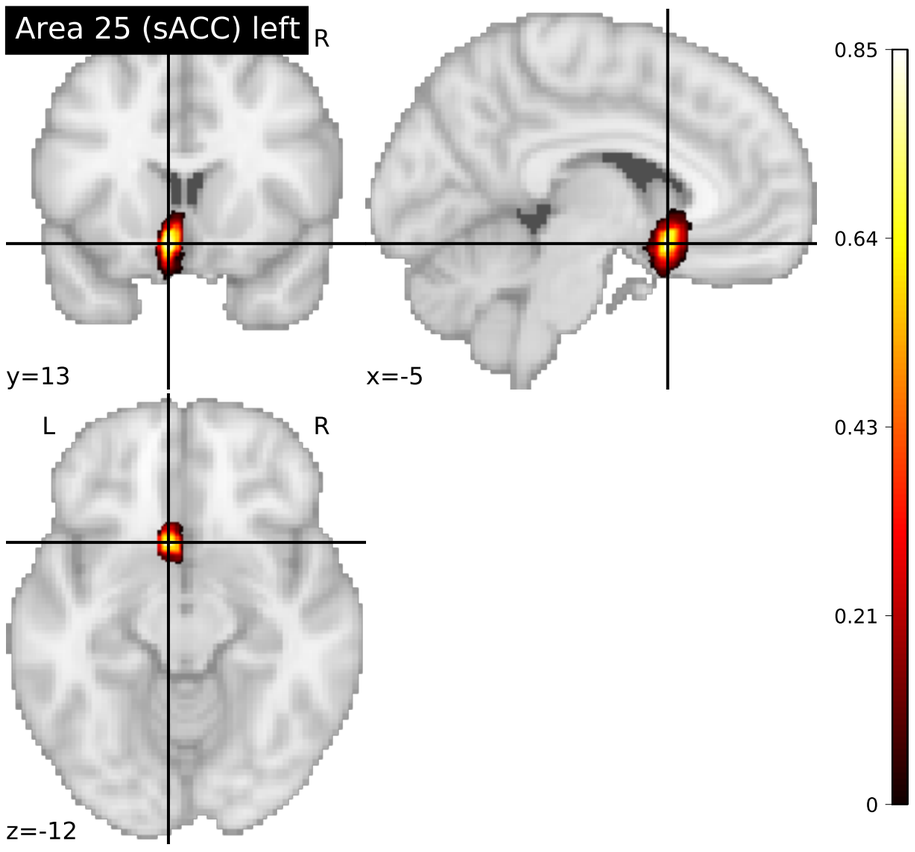


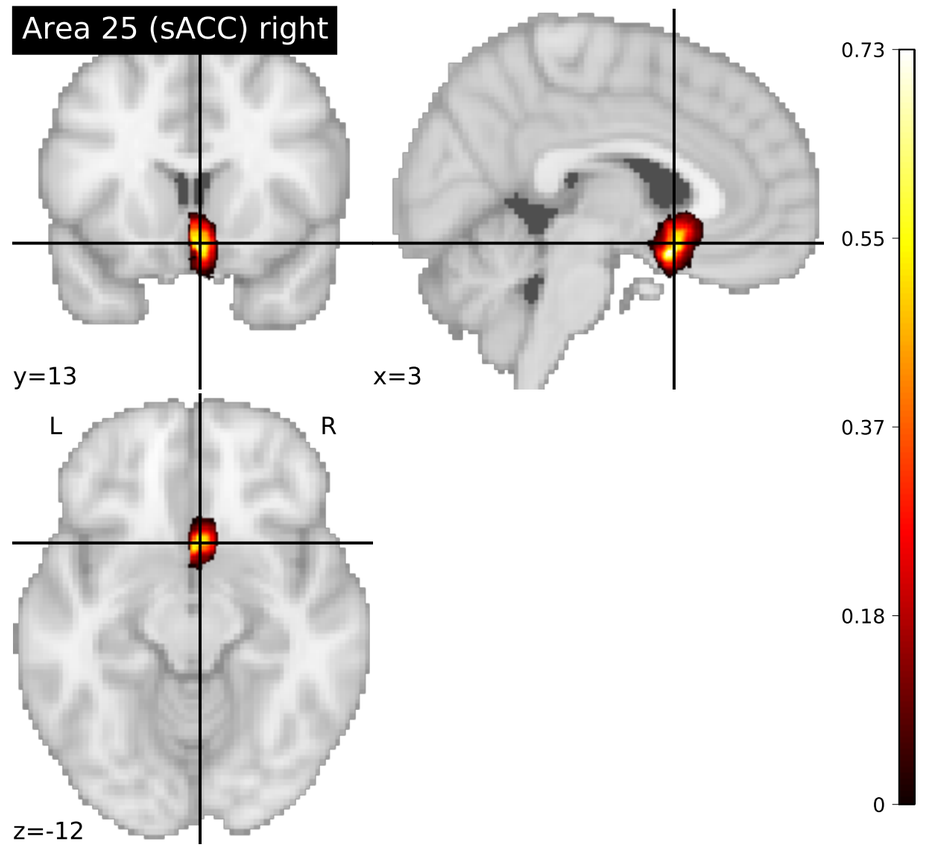
Area 25 (sACC)

Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral cortex
        └── limbic lobe
            └── cingulate gyrus, frontal part

This dataset contains the distinct architectonic Area 25 (sACC) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to Area 25 (sACC). The probability map of Area 25 (sACC) are provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Area 25 (sACC): Palomero-Gallagher et al. (2018) [Data set, v16.0] [DOI: 10.25493/NMPJ-EU](https://doi.org/10.25493%2FNMPJ-EU) The most probable delineation of Area 25 (sACC) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.13] [DOI: 10.25493/Q3ZS-NV6](https://doi.org/10.25493%2FQ3ZS-NV6) Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D)

Palomero-Gallagher, N., Eickhoff, S. B., Hoffstaedter, F., Schleicher, A., Mohlberg, H., Vogt, B. A.,... Zilles, K. (2015). Functional organization of human subgenual cortical areas: Relationship between architectonical segregation and connectional heterogeneity. NeuroImage, 115, 177-190.



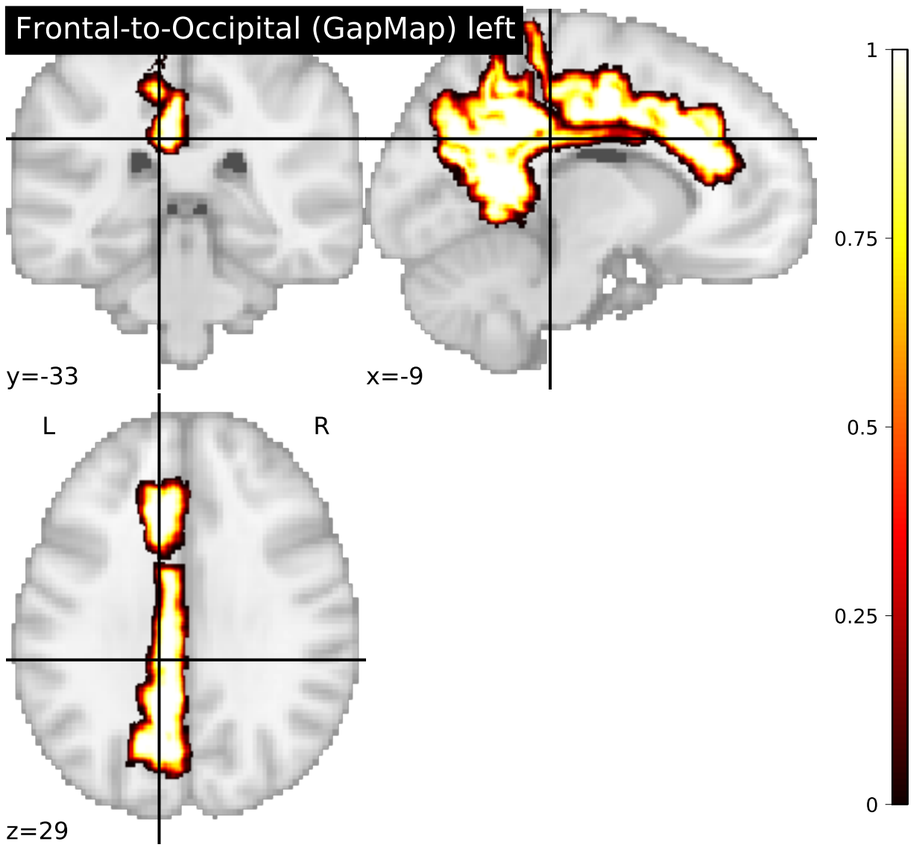


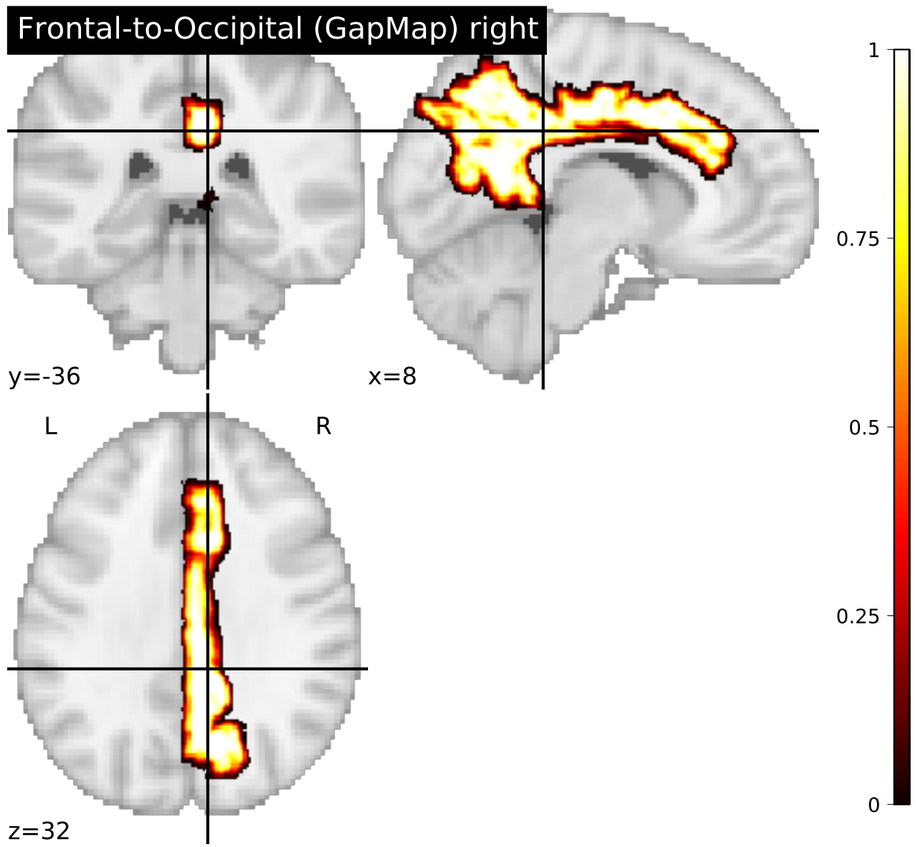
Frontal-to-Occipital (GapMap)

Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral cortex
        └── overall
            └── overall

This dataset contains the “GapMap Frontal to Occipital” in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. In order to provide whole-brain coverage for the cortex within the Julich-Brain Atlas, yet uncharted parts of the frontal cortex have been combined to the brain region “GapMap Frontal to Occipital”. The distributions were modeled so that probabilistic gap maps were computed in analogy to other maps of the Julich-Brain Atlas. The probabilistic map of “GapMap Frontal to Occipital” is provided in NifTi format for each hemisphere in the reference space. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. New maps are continuously replacing parts of “GapMap Frontal to Occipital” with progress in mapping. Other available data versions of Gap Map Frontal to Occipital: Amunts et al. (2020) [Data set, v9.0] [DOI: 10.25493/PBP4-HE6](https://doi.org/10.25493%2FPBP4-HE6) Amunts et al. (2020) [Data set, v9.1] [DOI: 10.25493/8EHQ-XYY](https://doi.org/10.25493%2F8EHQ-XYY) The most probable delineation of GapMap Frontal to Occipital derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493/TAKY-64D) Amunts et al. (2020) [Data set, v2.4] [DOI: 10.25493/A7Y0-NX9](https://doi.org/10.25493%2FA7Y0-NX9)

Amunts, K., Mohlberg, H., Bludau, S., Zilles, K. (2020). Julich-Brain – A 3D probabilistic atlas of human brain’s cytoarchitecture. Science 369, 988-992



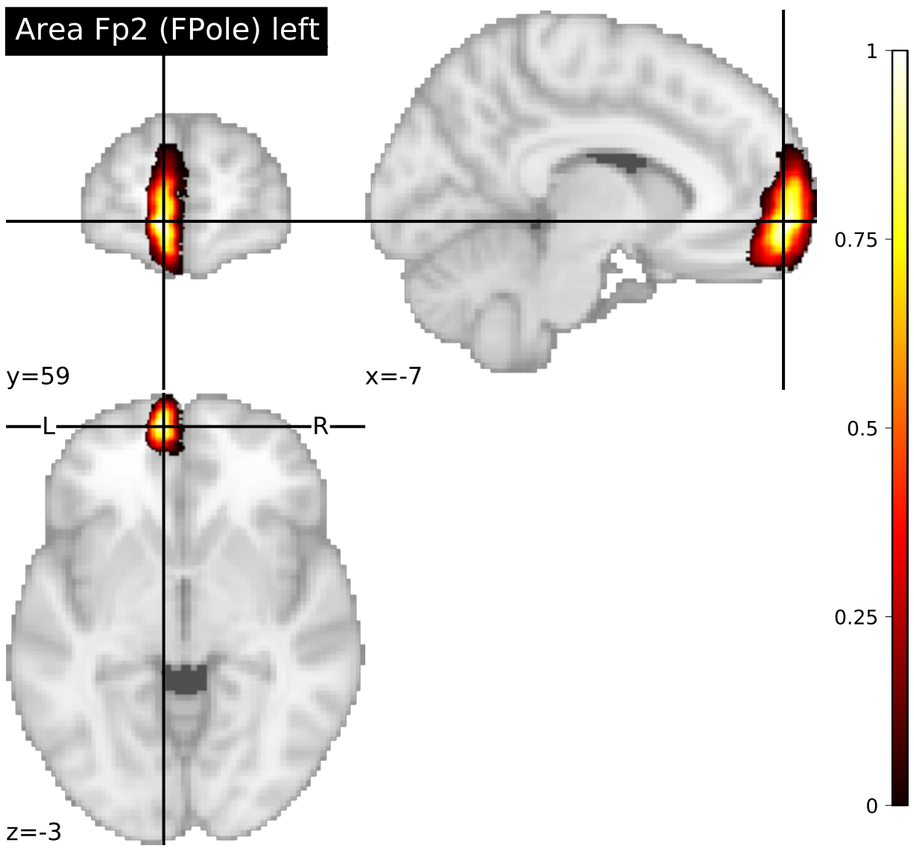


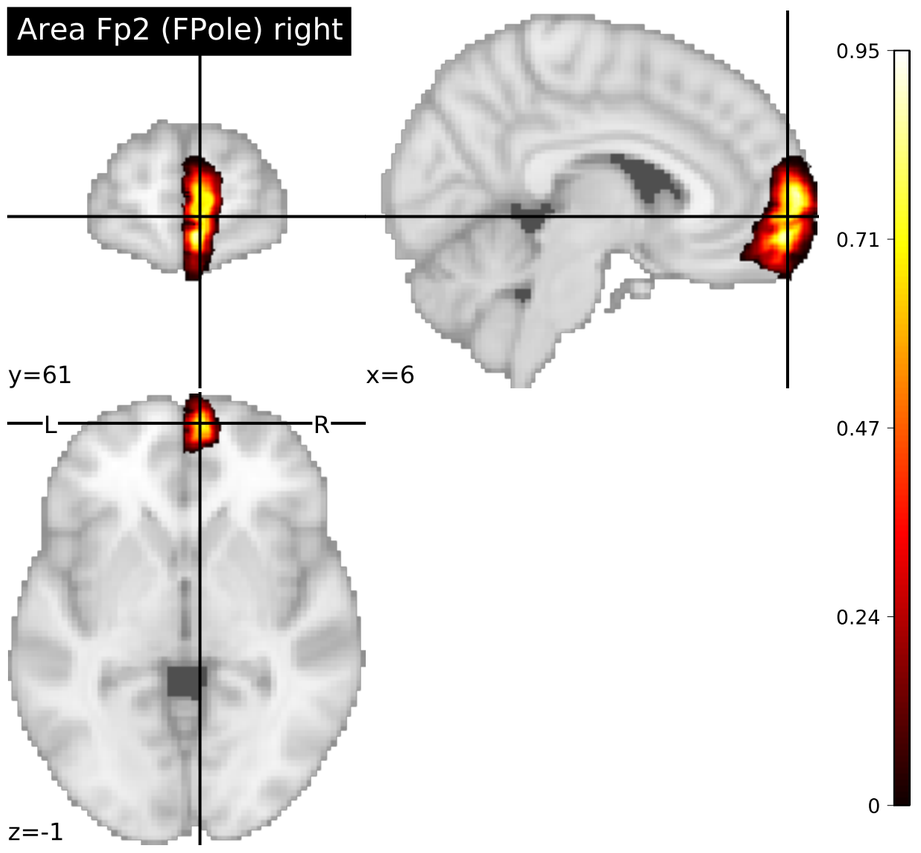
Area Fp2 (FPole)

Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral cortex
        └── frontal lobe
            └── frontal pole

This dataset contains the distinct architectonic Area Fp2 (FPole) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to Area Fp2 (FPole). The probability map of Area Fp2 (FPole) are provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Area Fp2 (FPole): Bludau et al. (2018) [Data set, v2.2] [DOI: 10.25493/26WT-E3P](https://doi.org/10.25493%2F26WT-E3P) The most probable delineation of Area Fp2 (FPole) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.13] [DOI: 10.25493/Q3ZS-NV6](https://doi.org/10.25493%2FQ3ZS-NV6) Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D)

Bludau, S., Eickhoff, S. B., Mohlberg, H., Caspers, S., Laird, A. R., Fox, P. T.,... Amunts, K. (2014). Cytoarchitecture, probability maps and functions of the human frontal pole. NeuroImage, 93, 260–275.





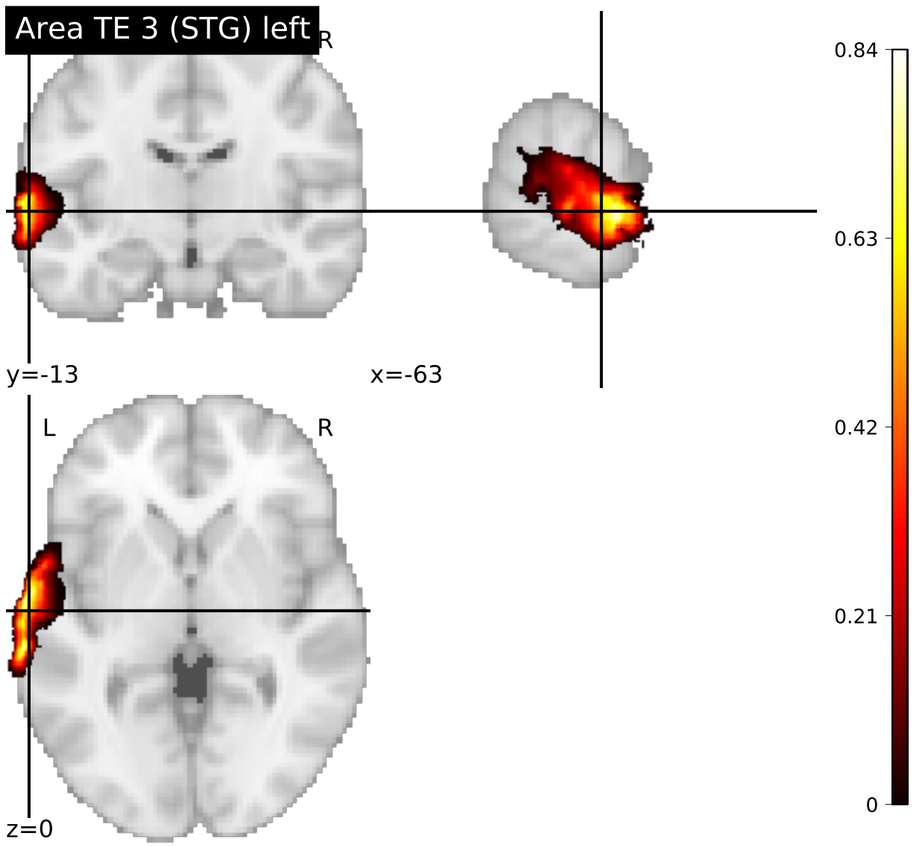
Area TE 3 (STG)

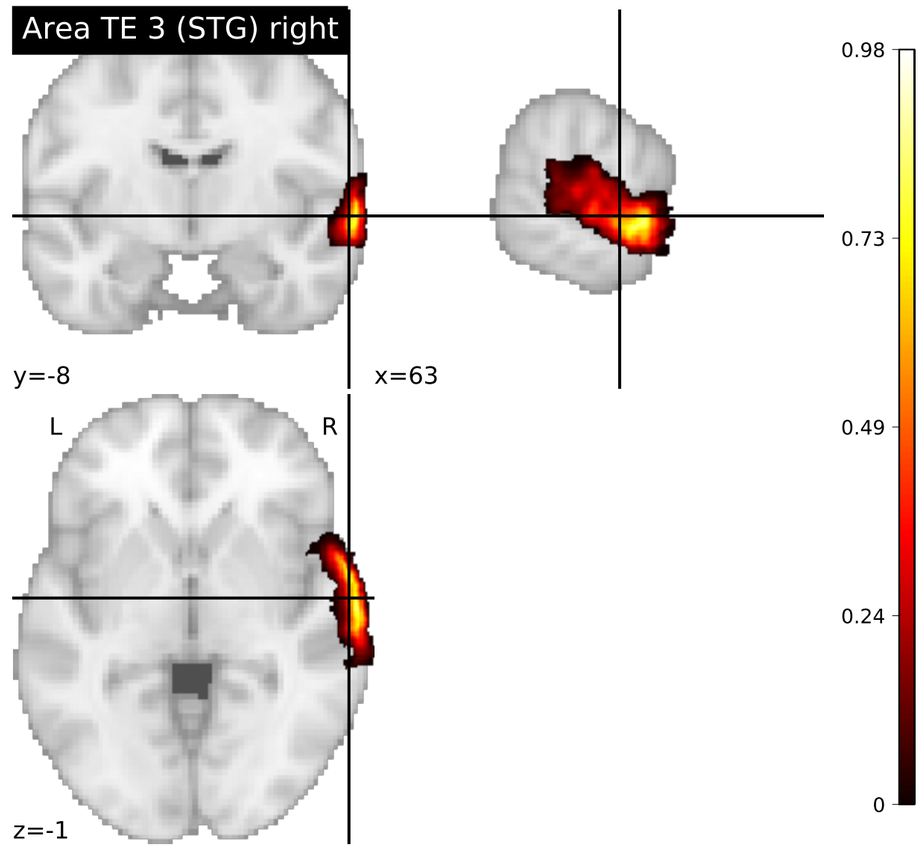
Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral cortex
        └── temporal lobe
            └── superior temporal gyrus

This dataset contains the distinct architectonic Area TE 3 (STG) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to Area TE 3 (STG). The probability map of Area TE 3 (STG) is provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Area TE 3 (STG): Morosan et al. (2018) [Data set, v5.0] [DOI: 10.25493/V09X-3EW](https://doi.org/10.25493%2FV09X-3EW) The most probable delineation of Area TE 3 (STG) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.13] [DOI: 10.25493/Q3ZS-NV6](https://doi.org/10.25493%2FQ3ZS-NV6) Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D)

Schleicher, A., Amunts, K., Geyer, S., Morosan, P., & Zilles, K. (1999). Observer-Independent Method for Microstructural Parcellation of Cerebral Cortex: A Quantitative Approach to Cytoarchitectonics. NeuroImage, 9(1), 165–177.

Morosan, P., Schleicher, A., Amunts, K., & Zilles, K. (2005). Multimodal architectonic mapping of human superior temporal gyrus. Anatomy and Embryology, 210(5-6), 401–406.

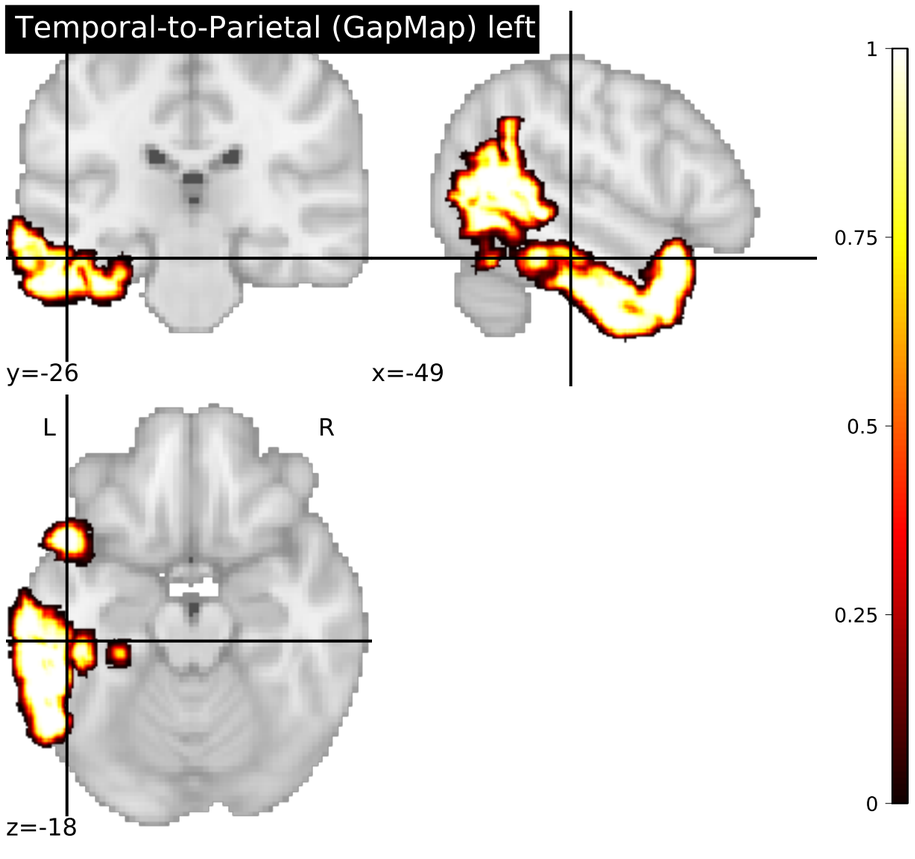


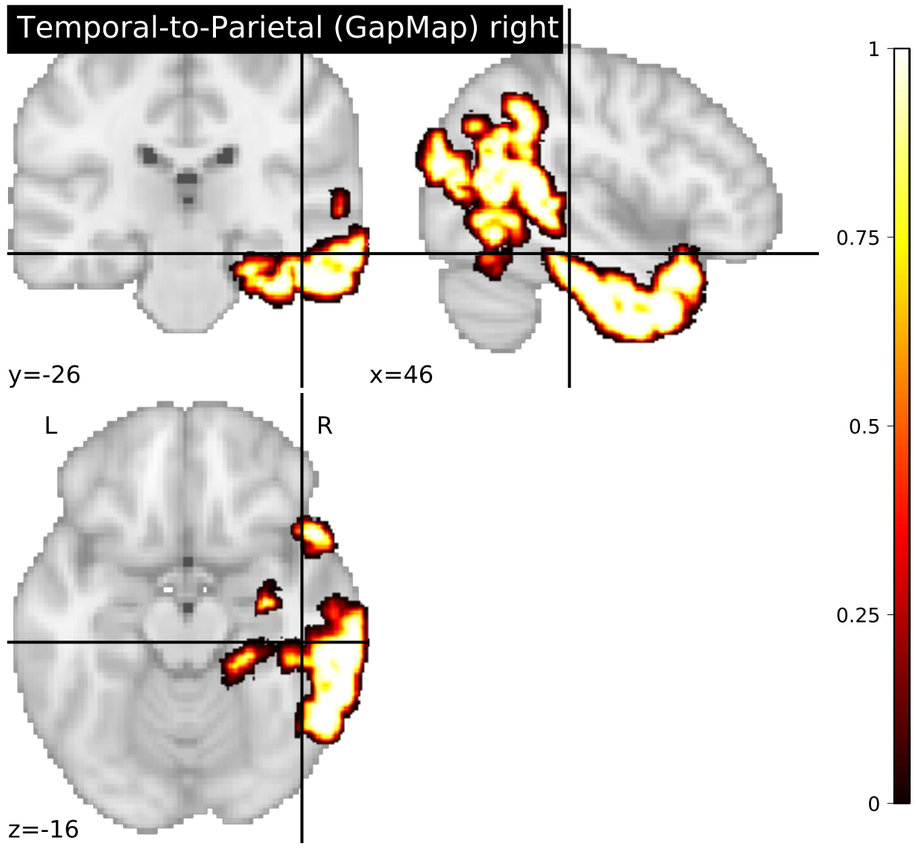


Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral cortex
        └── overall
            └── overall

This dataset contains the “GapMap Temporal to Parietal" in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. In order to provide whole-brain coverage for the cortex within the Julich-Brain Atlas, yet uncharted parts of the frontal cortex have been combined to the brain region “GapMap Temporal to Parietal”. The distributions were modeled so that probabilistic gap maps were computed in analogy to other maps of the Julich-Brain Atlas. The probabilistic map of “GapMap Temporal to Parietal” is provided in NifTi format for each hemisphere in the reference space. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. New maps are continuously replacing parts of “GapMap Temporal to Parietal” with progress in mapping. Other available data versions of Gap Map Temporal to Parietal: Amunts et al. (2020) [Data set, v9.0] [DOI: 10.25493/96J9-BVV](https://doi.org/10.25493%2F96J9-BVV) Amunts et al. (2020) [Data set, v9.1] [DOI: 10.25493/EZPF-Y21](https://doi.org/10.25493%2FEZPF-Y21) The most probable delineation of GapMap Temporal to Parietal derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493/TAKY-64D) Amunts et al. (2020) [Data set, v2.4] [DOI: 10.25493/A7Y0-NX9](https://doi.org/10.25493%2FA7Y0-NX9)

Amunts, K., Mohlberg, H., Bludau, S., Zilles, K. (2020). Julich-Brain – A 3D probabilistic atlas of human brain’s cytoarchitecture. Science 369, 988-992

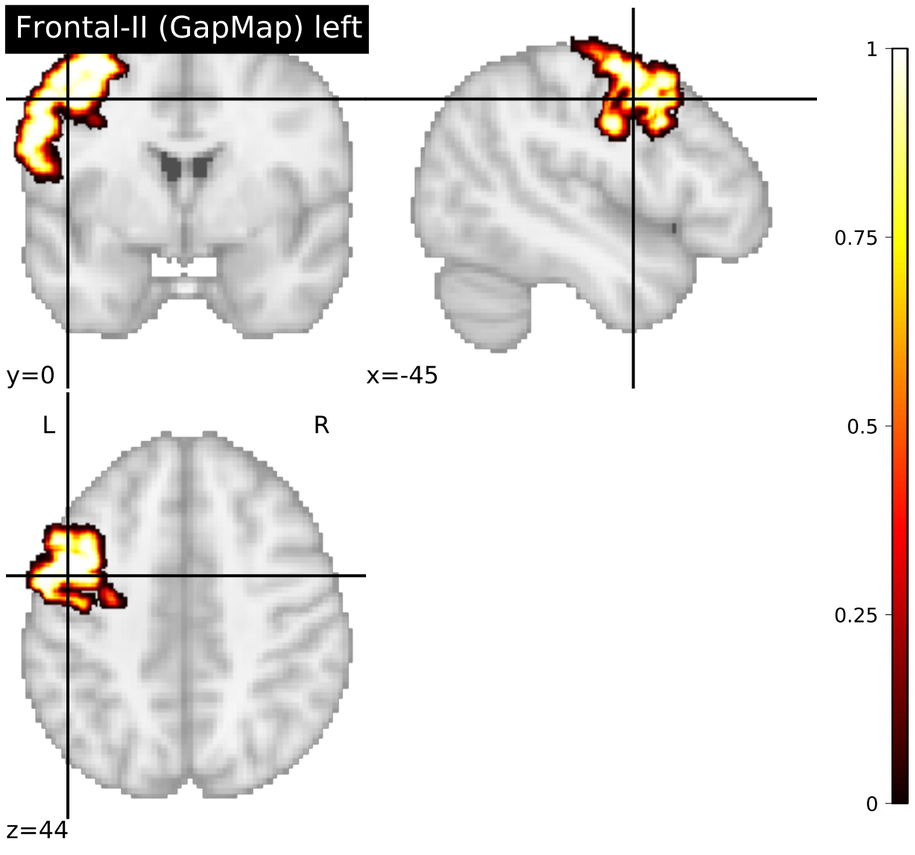


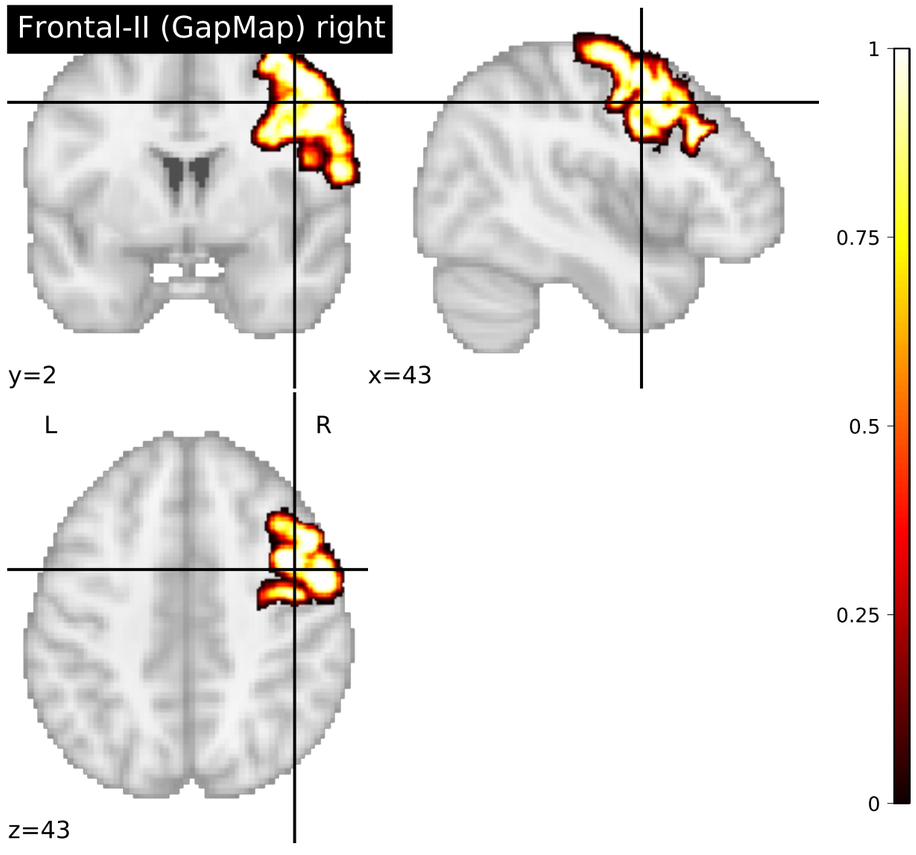


Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral cortex
        └── overall
            └── overall

This dataset contains the “Gap Map Frontal II” in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. In order to provide whole-brain coverage for the cortex within the Julich-Brain Atlas, yet uncharted parts of the frontal cortex have been combined to the brain region “Gap Map Frontal II”. The distributions were modeled so that probabilistic gap maps were computed in analogy to other maps of the Julich-Brain Atlas. The probabilistic map of “Gap Map Frontal II” is provided in NifTi format for each hemisphere in the reference space. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. New maps are continuously replacing parts of “Gap Map Frontal II” with progress in mapping. Other available data versions of Gap Map Frontal II: Amunts et al. (2020) [Data set, v9.0] [DOI: 10.25493/XCKH-NF9](https://doi.org/10.25493%2FXCKH-NF9) Amunts et al. (2020) [Data set, v9.1] [DOI: 10.25493/H54A-PEB](https://doi.org/10.25493%2FH54A-PEB) The most probable delineation of Gap Map Frontal II derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493/TAKY-64D) Amunts et al. (2020) [Data set, v2.4] [DOI: 10.25493/A7Y0-NX9](https://doi.org/10.25493%2FA7Y0-NX9)

Amunts, K., Mohlberg, H., Bludau, S., Zilles, K. (2020). Julich-Brain – A 3D probabilistic atlas of human brain’s cytoarchitecture. Science 369, 988-992





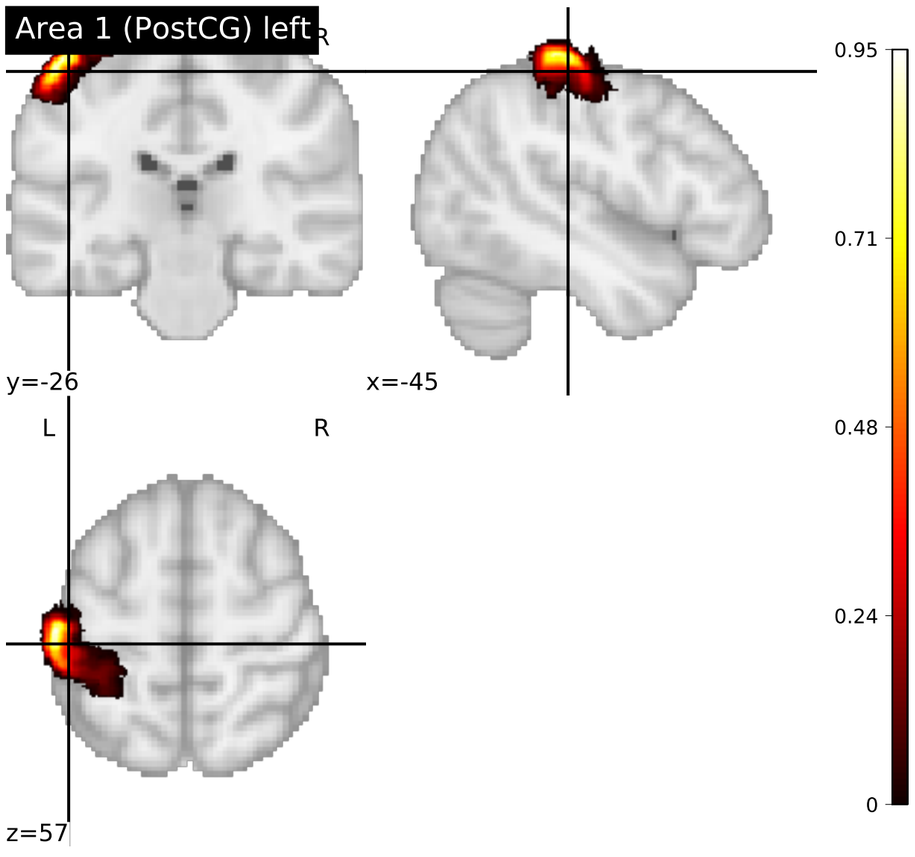
Area 1 (PostCG)

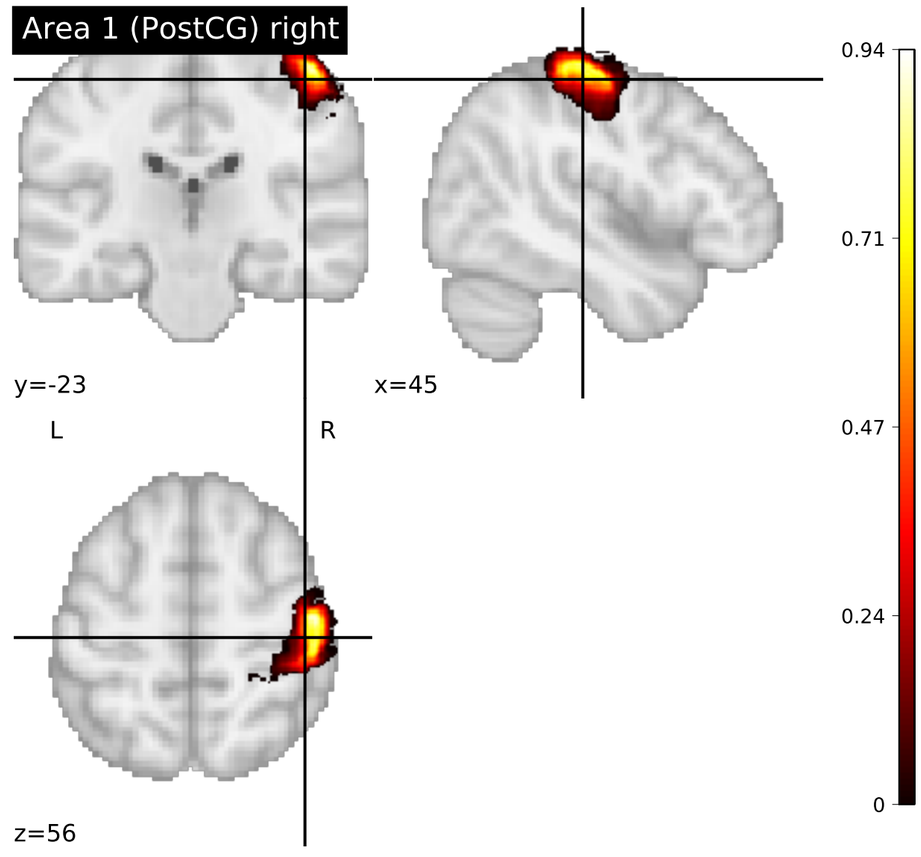
Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral cortex
        └── parietal lobe
            └── postcentral gyrus

This dataset contains the distinct architectonic Area 1 (PostCG) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to Area 1 (PostCG). The probability map of Area 1 (PostCG) is provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Area 1 (PostCG): Geyer et al. (2018) [Data set, v8.2] [DOI: 10.25493/3D29-NJ7](https://doi.org/10.25493%2F3D29-NJ7) The most probable delineation of Area 1 (PostCG) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.13] [DOI: 10.25493/Q3ZS-NV6](https://doi.org/10.25493%2FQ3ZS-NV6) Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D)

Geyer, S., Schleicher, A., & Zilles, K. (1999). Areas 3a, 3b, and 1 of Human Primary Somatosensory Cortex. NeuroImage, 10(1), 63–83.

Geyer, S., Schormann, T., Mohlberg, H., & Zilles, K. (2000). Areas 3a, 3b, and 1 of Human Primary Somatosensory Cortex. NeuroImage, 11(6), 684–696.



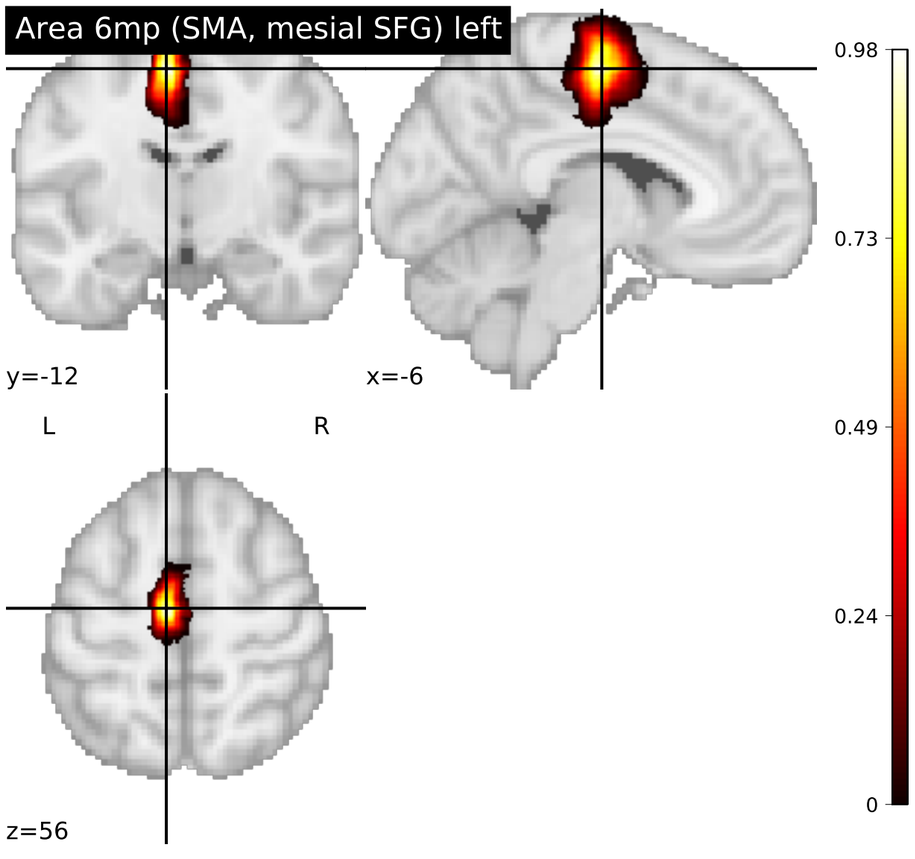


Area 6mp (SMA, mesial SFG)

Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral cortex
        └── frontal lobe
            └── mesial precentral gyrus

This dataset contains the distinct architectonic Area 6mp (SMA, mesial SFG) in the MNI Colin 27 and MNI ICBM 152 reference spaces. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. Subsequently the results of the cytoarchitectonic analysis are mapped to the MNI Colin 27 and MNI ICBM 152 reference spaces where each voxel is assigned with the probability to belong to Area 6mp (SMA, mesial SFG). The probability map of Area 6mp (SMA, mesial SFG) are provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Area 6mp (SMA, mesial SFG): Ruan et al. (2019) [Data set, v9.0] [DOI: 10.25493/CZTA-P58](https://doi.org/10.25493%2FCZTA-P58) The most probable delineation of Area 6mp (SMA, mesial SFG) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D)

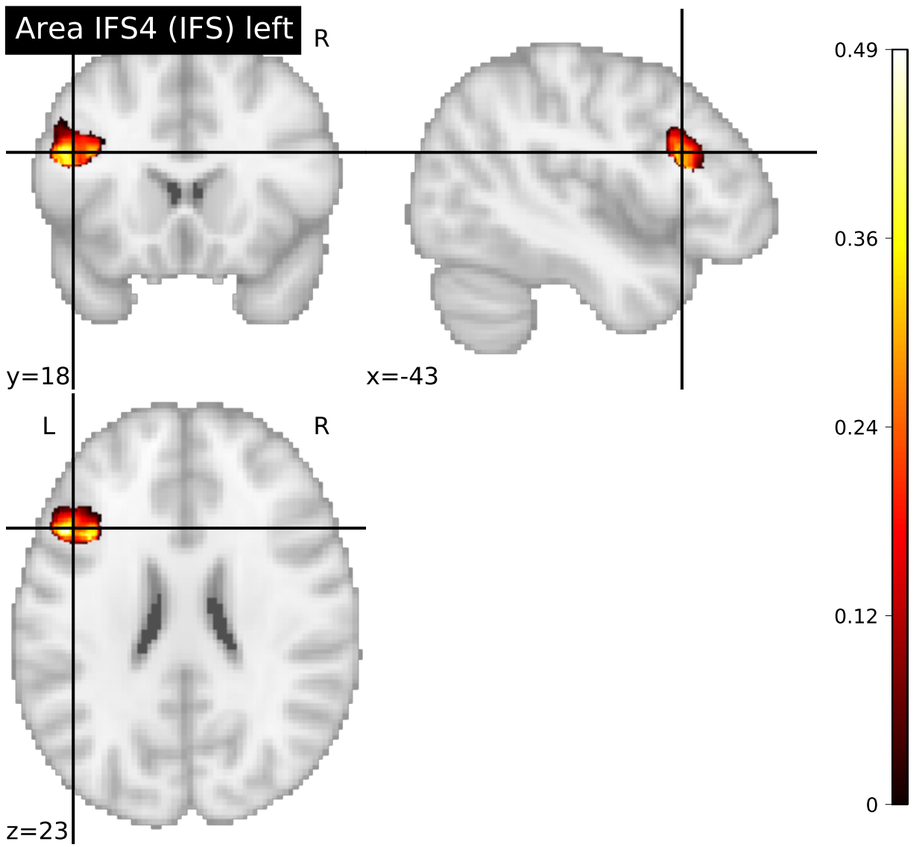
Ruan, J., Bludau, S., Palomero-Gallagher, N., Caspers, S., Mohlberg, H., Eickhoff, S. B., Seitz, R. J., Amunts, A. (2018) Cytoarchitecture, probability maps, and functions of the human supplementary and pre-supplementary motor areas, 223(9):4169-4186.

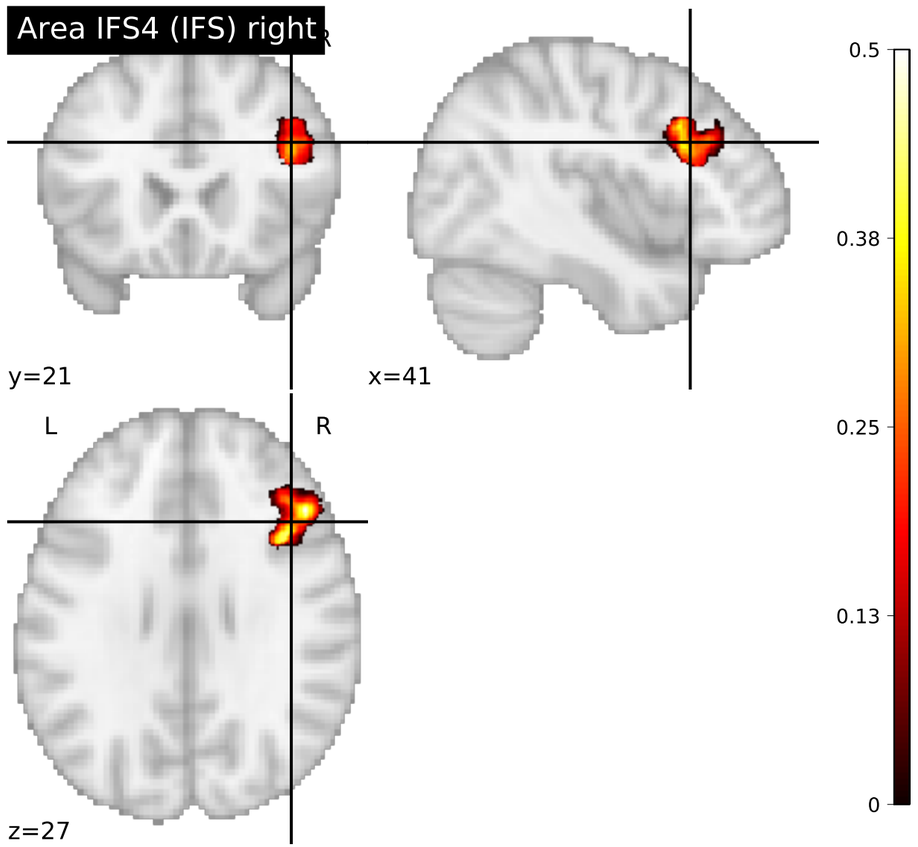


Area IFS4 (IFS)

Julich-Brain Cytoarchitectonic Maps 2.9
- telencephalon
  - cerebral cortex
    - frontal lobe
      - inferior frontal sulcus

This dataset contains cytoarchitectonic maps of Area ifs4 (IFS) in the BigBrain. The mappings were created using cytoarchitectonic criteria applied on digitized histological sections of 1 µm resolution, cut in coronal plane. Areal borders have been detected by an oberserver-independent border definition (Schleicher 2000). Mappings are available on sections of the BigBrain and have been transformed to the 3D reconstructed BigBrain space using the transformations used in Amunts et al. 2013. From these delineations, a preliminary 3D map of Area ifs4 (IFS) has been created by simple interpolation of the coronal contours in the 3D anatomical space of the Big Brain. This map gives a first impression of the location of this area in the Big Brain, and can be viewed in the atlas viewer using the URL below.





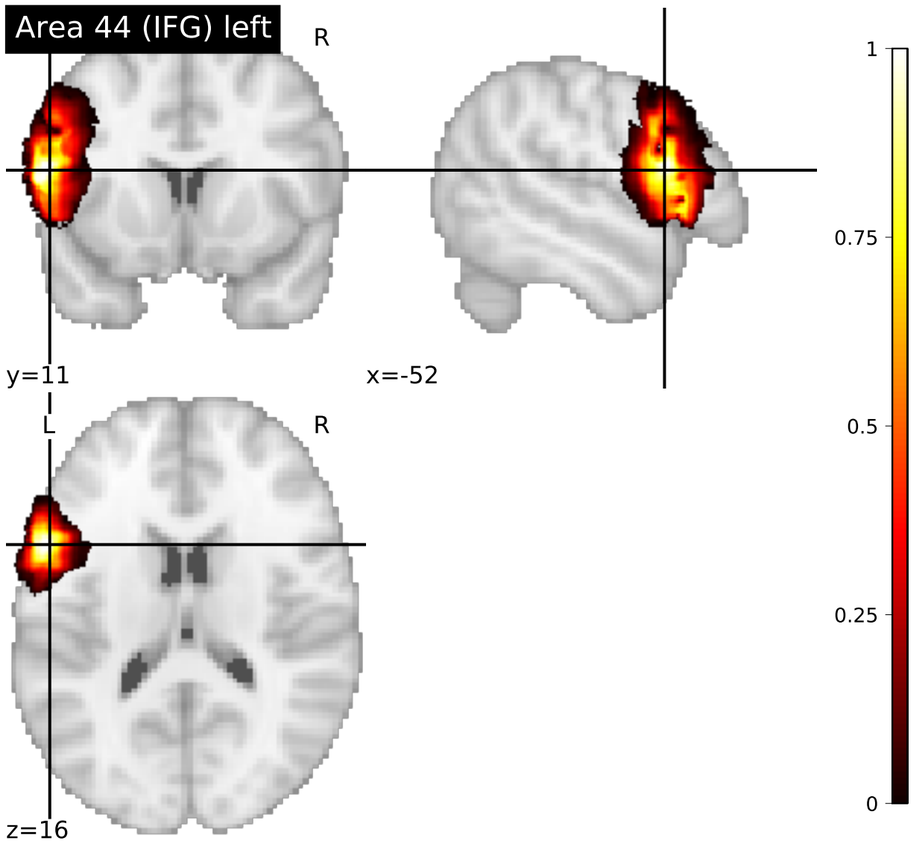
Area 44 (IFG)

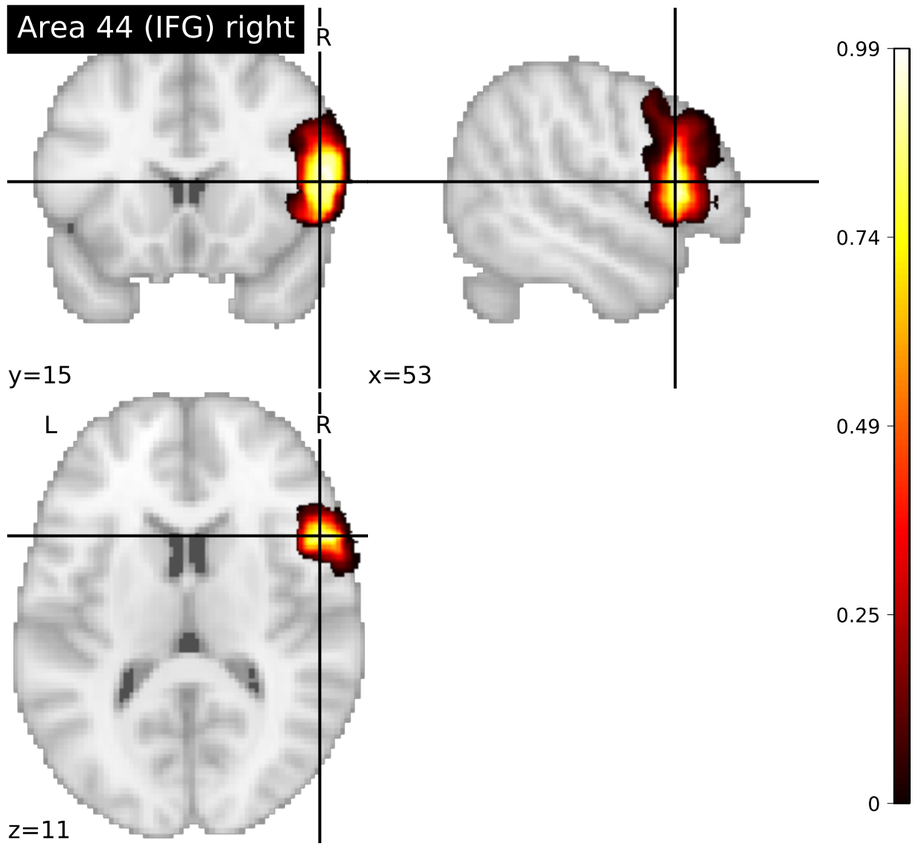
Julich-Brain Cytoarchitectonic Maps 2.9
- telencephalon
  - cerebral cortex
    - frontal lobe
      - inferior frontal gyrus

This dataset contains the distinct architectonic Area 44 (IFG) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to Area 44 (IFG). The probability map of Area 44 (IFG) are provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Area 44 (IFG): Amunts et al. (2018) [Data set, v7.2] [DOI: 10.25493/J2KZ-AZW](https://doi.org/10.25493%2FJ2KZ-AZW) The most probable delineation of Area 44 (IFG) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.13] [DOI: 10.25493/Q3ZS-NV6](https://doi.org/10.25493%2FQ3ZS-NV6) Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D)

Amunts, K., Schleicher, A., Bürgel, U., Mohlberg, H., Uylings, H. B. M., & Zilles, K. (1999). Broca's region revisited: Cytoarchitecture and intersubject variability. The Journal of Comparative Neurology, 412(2), 319–341.

Amunts, K., Weiss, P. H., Mohlberg, H., Pieperhoff, P., Eickhoff, S., Gurd, J. M., … Zilles, K. (2004). Analysis of neural mechanisms underlying verbal fluency in cytoarchitectonically defined stereotaxic space—The roles of Brodmann areas 44 and 45. NeuroImage, 22(1), 42–56.



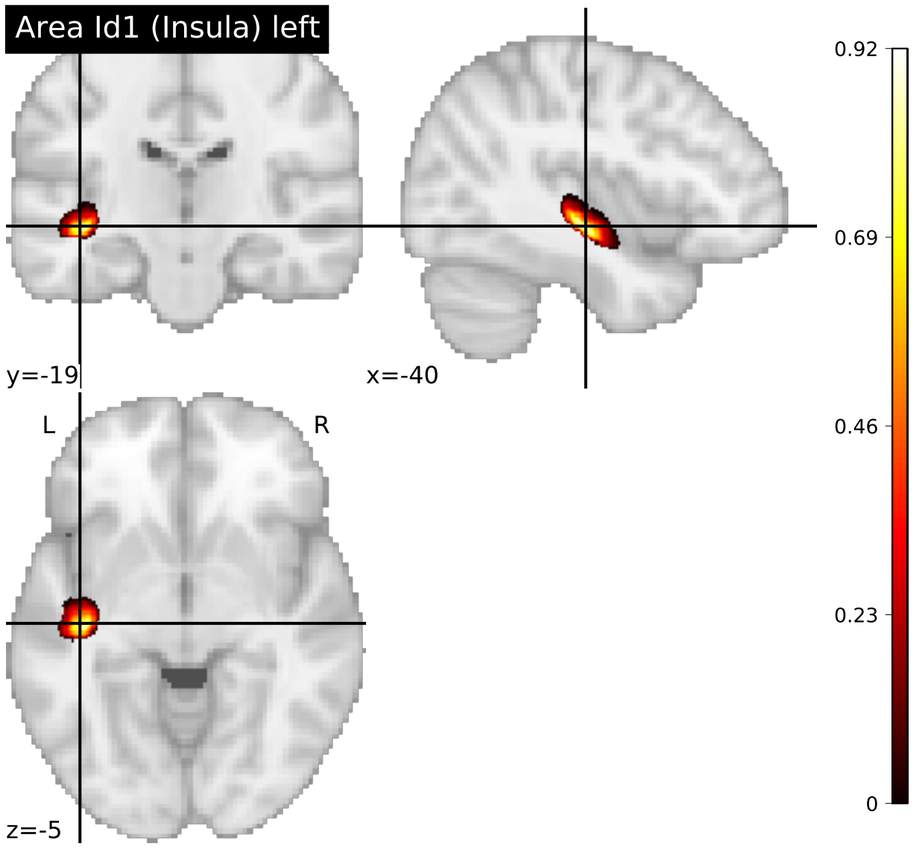


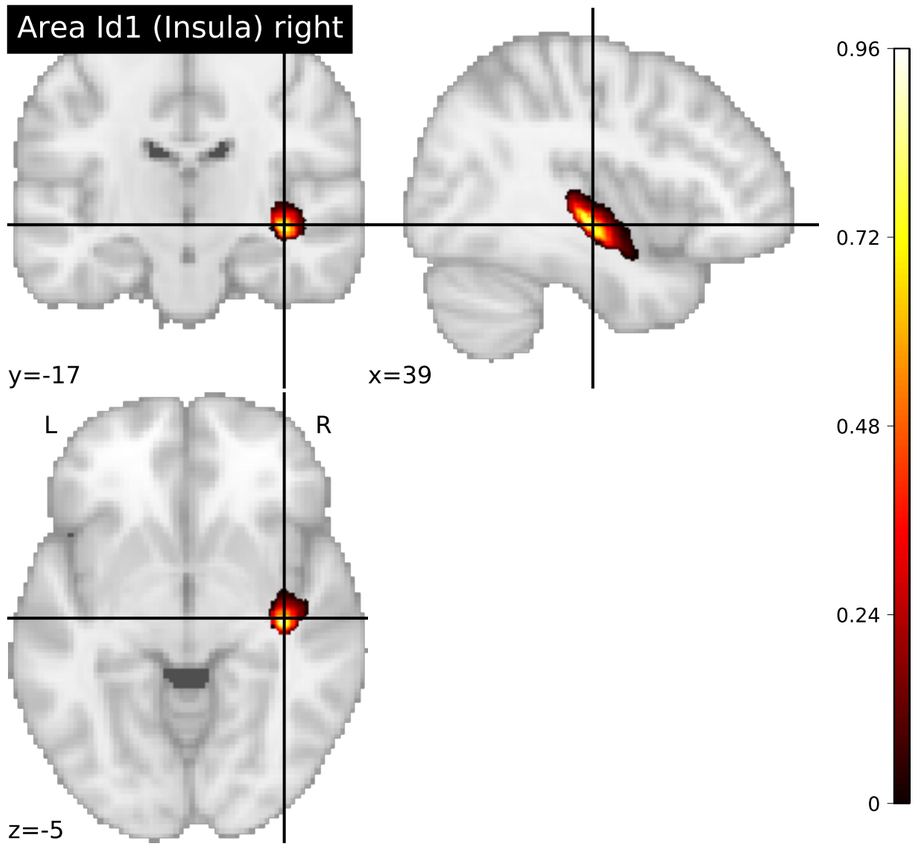
Area Id1 (Insula)

Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral cortex
        └── insula
            └── dysgranular insula

This dataset contains the distinct architectonic Area Id1 (Insula) in the MNI Colin 27 and MNI ICBM 152 reference spaces. As part of the Julich-Brain atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. Subsequently, the results of the cytoarchitectonic analysis are mapped to the MNI Colin 27 and MNI ICBM 152 reference spaces where each voxel is assigned with the probability to belong to Area Id1 (Insula). The probability map of Area Id1 (Insula) is provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Area Id1 (Insula): Kurth et al. (2018) [Data set, v11.0] [DOI: 10.25493/KPB6-2AX](https://doi.org/10.25493%2FKPB6-2AX) The most probable delineation of Area Id1 (Insula) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.13] [DOI: 10.25493/Q3ZS-NV6](https://doi.org/10.25493%2FQ3ZS-NV6) Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D)

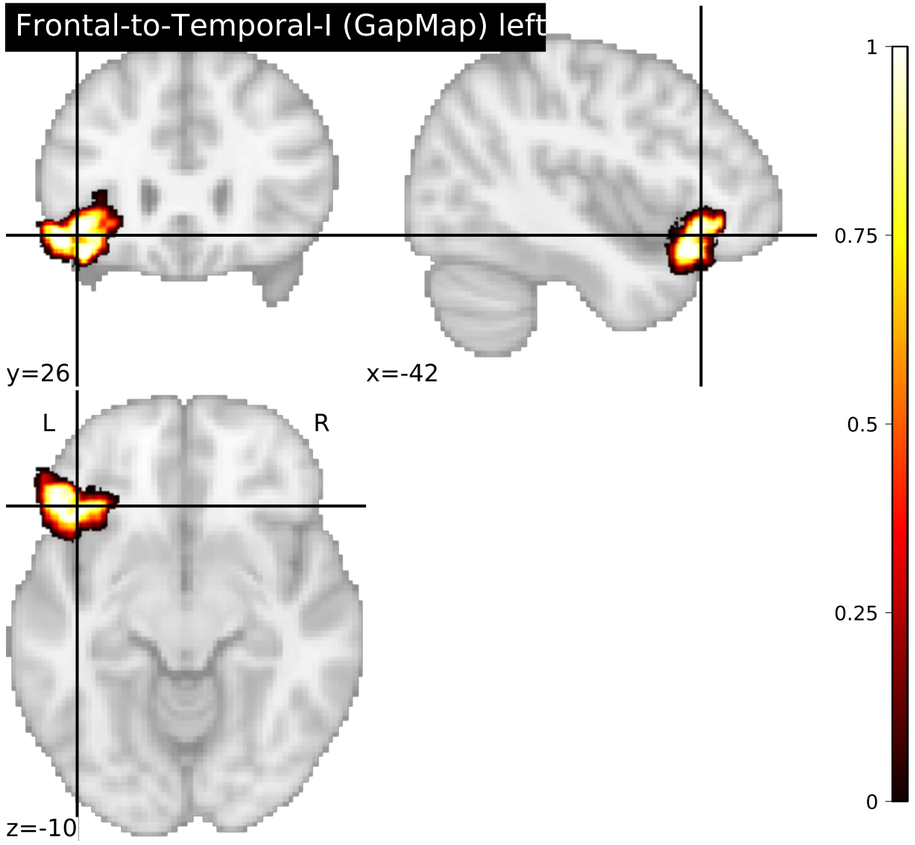
Kurth, F., Eickhoff, S. B., Schleicher, A., Hoemke, L., Zilles, K., & Amunts, K. (2009). Cytoarchitecture and Probabilistic Maps of the Human Posterior Insular Cortex. Cerebral Cortex, 20(6), 1448–1461.

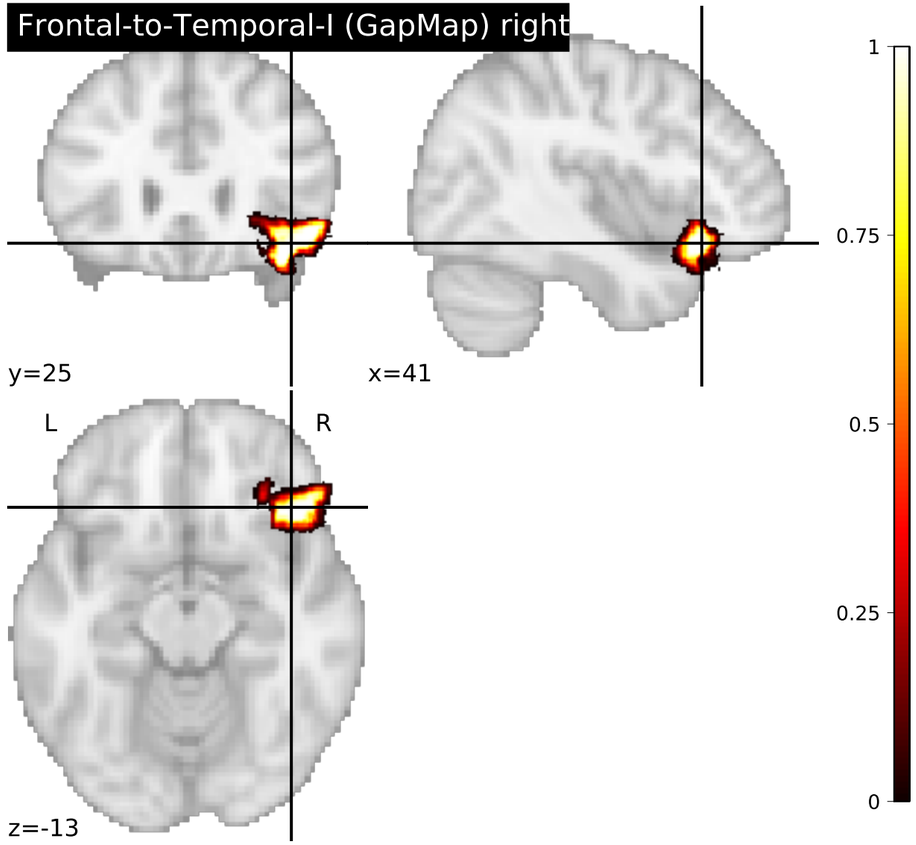




Frontal-to-Temporal-I (GapMap)

Julich-Brain Cytoarchitectonic Maps 2.9
- cerebral cortex
  - overall
    - overall





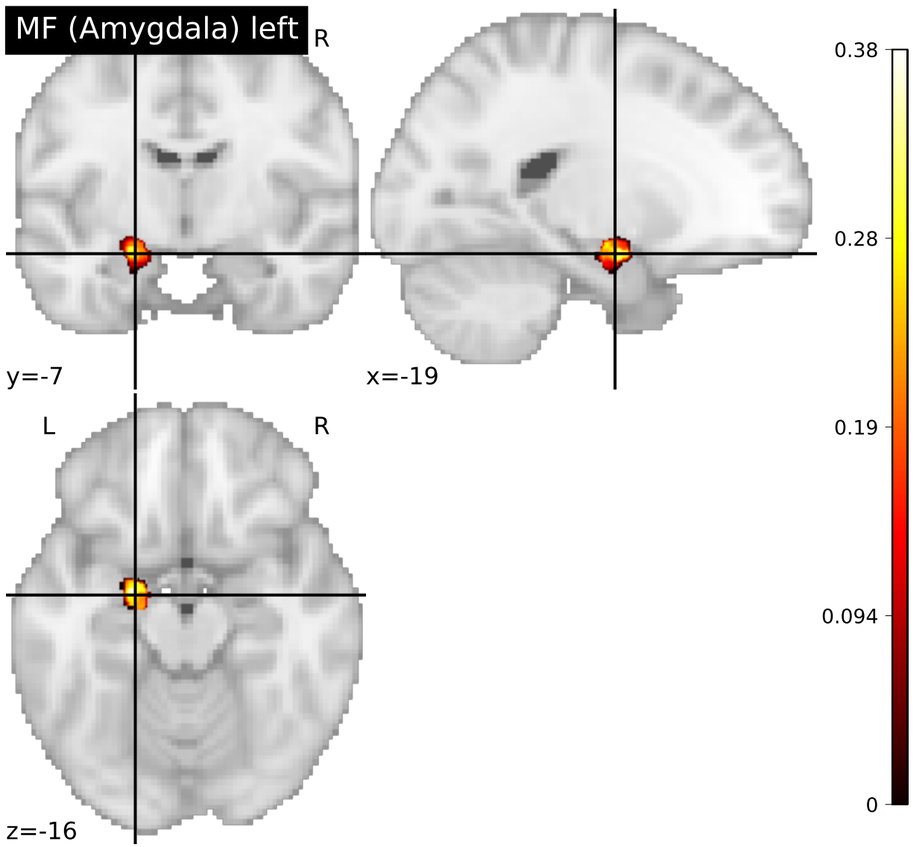
MF (Amygdala)

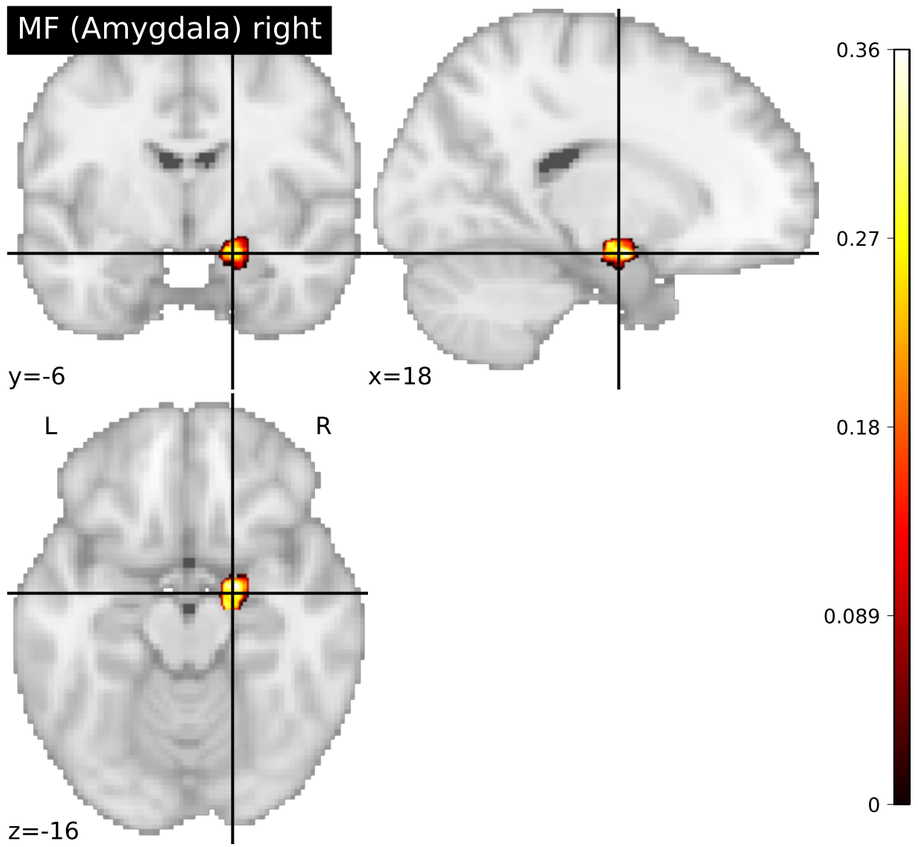
Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral nuclei
        └── amygdala
            └── fiber masses

This dataset contains the distinct architectonic MF (Amygdala) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to MF (Amygdala). The probability map of MF (Amygdala) are provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. The most probable delineation of MF (Amygdala) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D)

Kedo, O., Zilles, K., Palomero-Gallagher, N., Schleicher, A., Mohlberg, H., Bludau, S., Amunts, K. (2018). Receptor-driven, multimodal mapping of the human amygdala. Brain Struct Funct., 223(4):1637-1666.

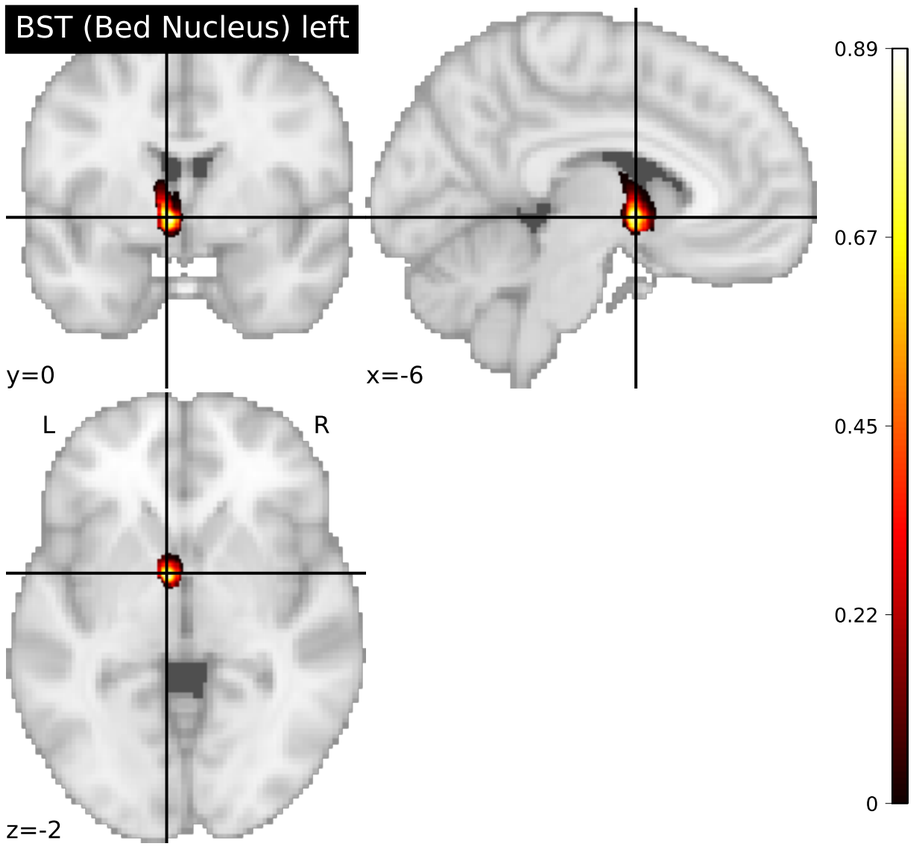
Amunts, K., Kedo, O., Kindler, M., Pieperhoff, P., Mohlberg, H., Shah, N. J.,... Zilles, K. (2005). Cytoarchitectonic mapping of the human amygdala, hippocampal region and entorhinal cortex: intersubject variability and probability maps. Anatomy and Embryology, 210(5-6), 343–352.

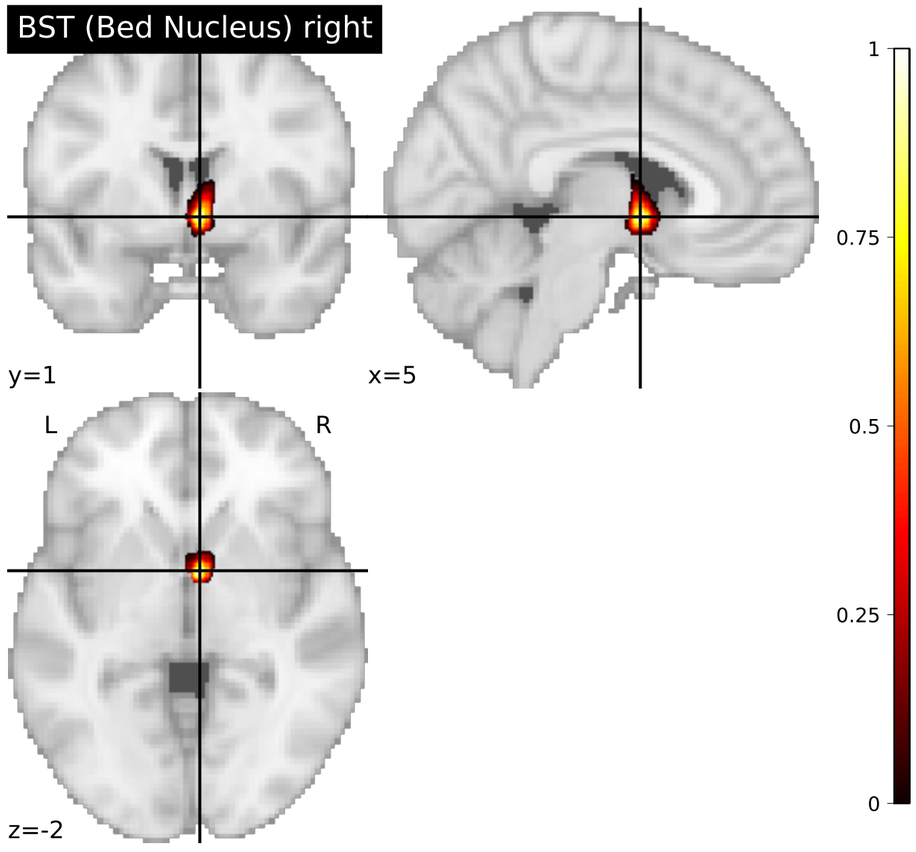




BST (Bed Nucleus)

Julich-Brain Cytoarchitectonic Maps 2.9
- telencephalon
  - cerebral nuclei
    - ventral striatum
      - bed nucleus





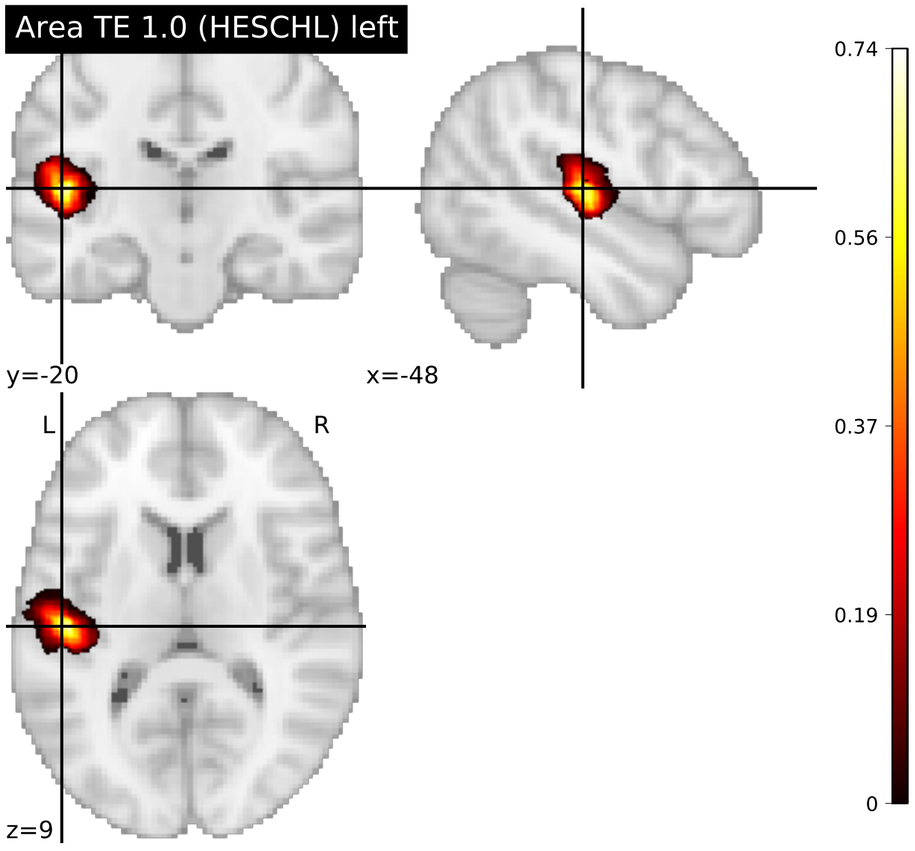
Area TE 1.0 (HESCHL)

Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
  └── cerebral cortex
    └── temporal lobe
      └── Heschl's gyrus

This dataset contains the distinct architectonic Area TE 1.0 (HESCHL) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to Area TE 1.0 (HESCHL). The probability map of Area TE 1.0 (HESCHL) is provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Area TE 1.0 (HESCHL): Morosan et al. (2018) [Data set, v5.0] [DOI: 10.25493/CP2T-FYT](https://doi.org/10.25493%2FCP2T-FYT) The most probable delineation of Area TE 1.0 (HESCHL) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.13] [DOI: 10.25493/Q3ZS-NV6](https://doi.org/10.25493%2FQ3ZS-NV6) Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D)

Morosan, P., Rademacher, J., Schleicher, A., Amunts, K., Schormann, T., & Zilles, K. (2001). Human Primary Auditory Cortex: Cytoarchitectonic Subdivisions and Mapping into a Spatial Reference System. NeuroImage, 13(4), 684–701.

Rademacher, J., Morosan, P., Schormann, T., Schleicher, A., Werner, C., Freund, H.-J., & Zilles, K. (2001). Probabilistic Mapping and Volume Measurement of Human Primary Auditory Cortex. NeuroImage, 13(4), 669–683.

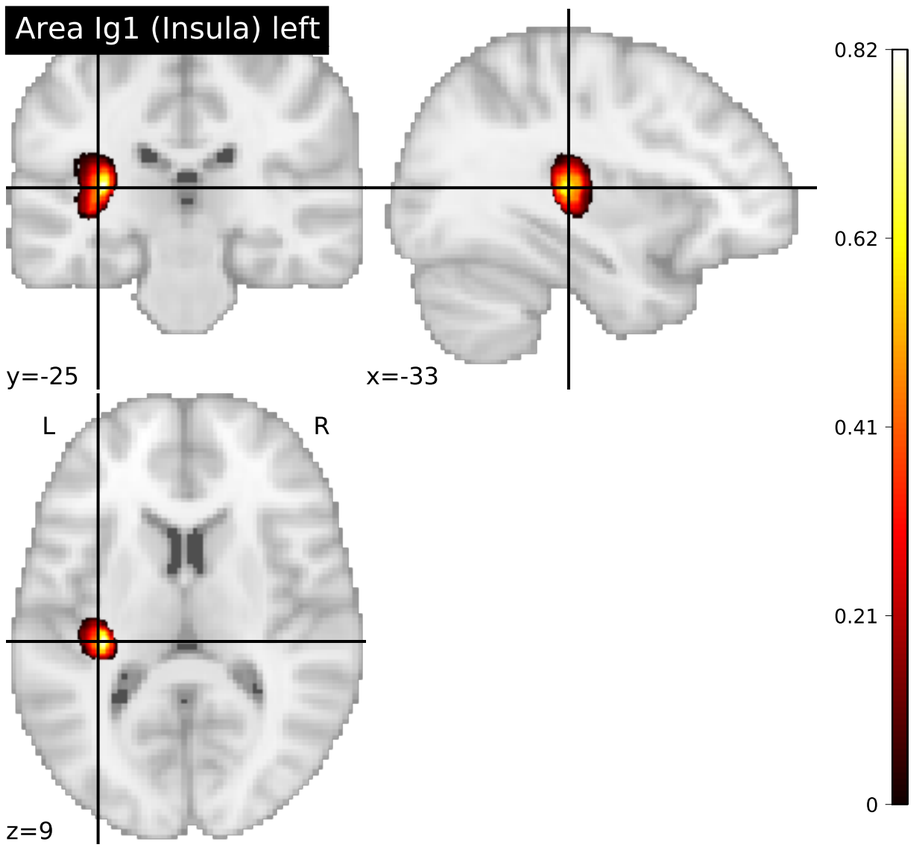


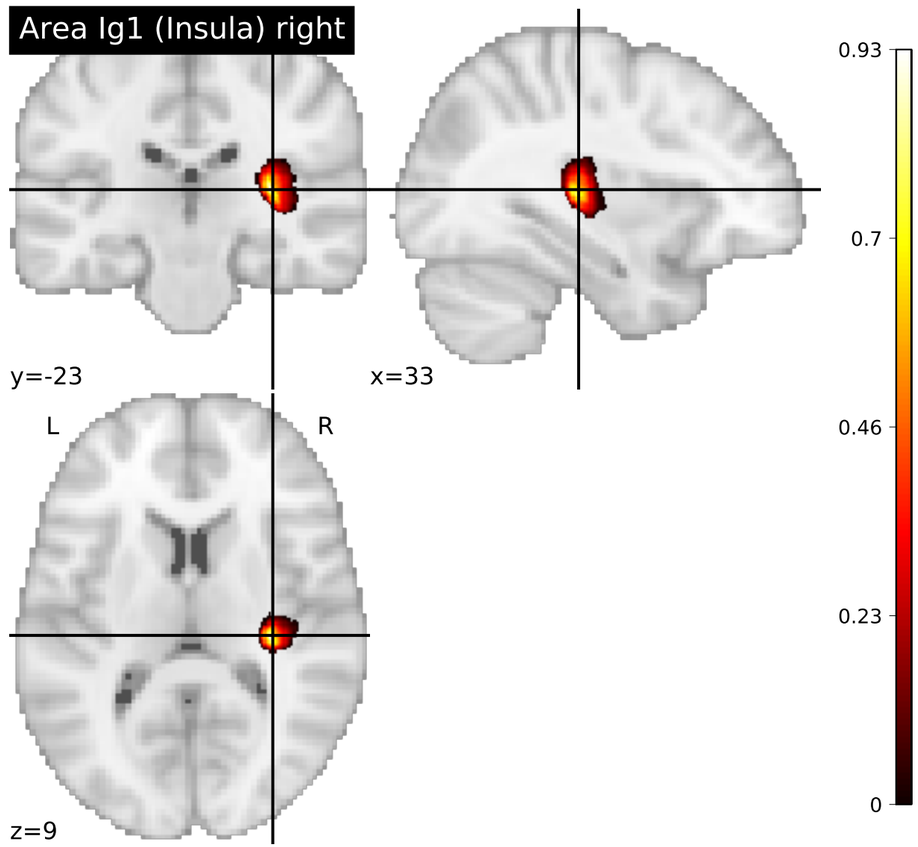
Area Ig1 (Insula)

Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral cortex
        └── insula
            └── granular insula

This dataset contains the distinct architectonic Area Ig1 (Insula) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to Area Ig1 (Insula). The probability map of Area Ig1 (Insula) is provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Area Ig1 (Insula): Kurth et al. (2018) [Data set, v11.0] [DOI: 10.25493/H2H6-0SA](https://doi.org/10.25493%2FH2H6-0SA) The most probable delineation of Area Ig1 (Insula) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.13] [DOI: 10.25493/Q3ZS-NV6](https://doi.org/10.25493%2FQ3ZS-NV6) Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D)

Kurth, F., Eickhoff, S. B., Schleicher, A., Hoemke, L., Zilles, K., & Amunts, K. (2009). Cytoarchitecture and Probabilistic Maps of the Human Posterior Insular Cortex. Cerebral Cortex, 20(6), 1448–1461.



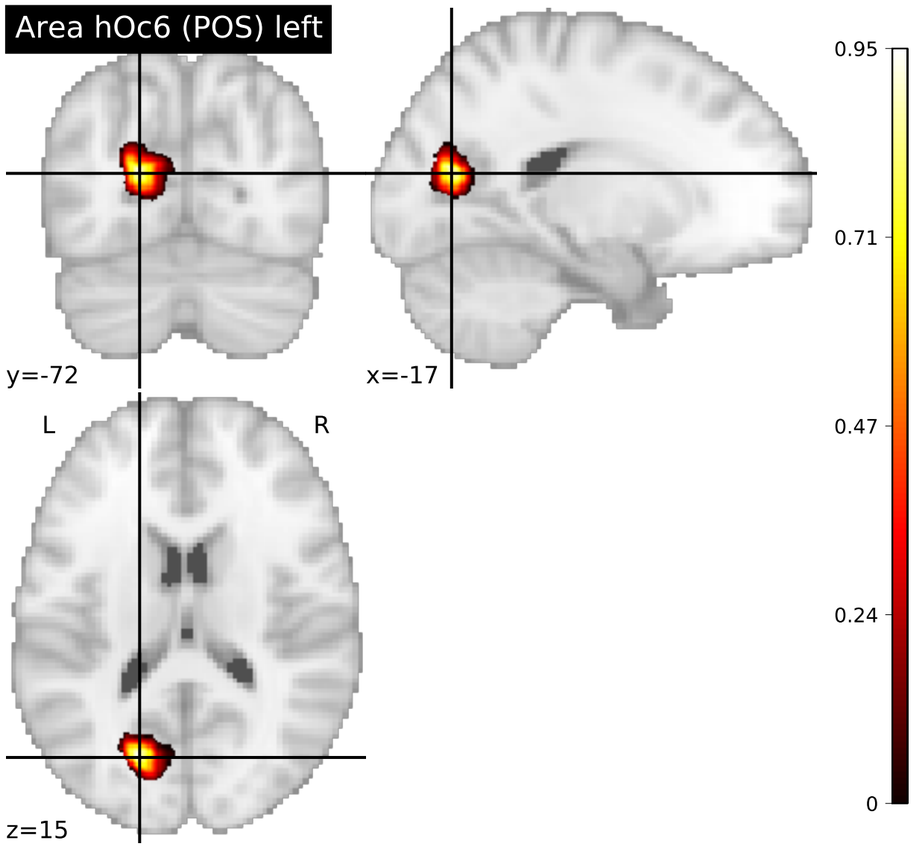


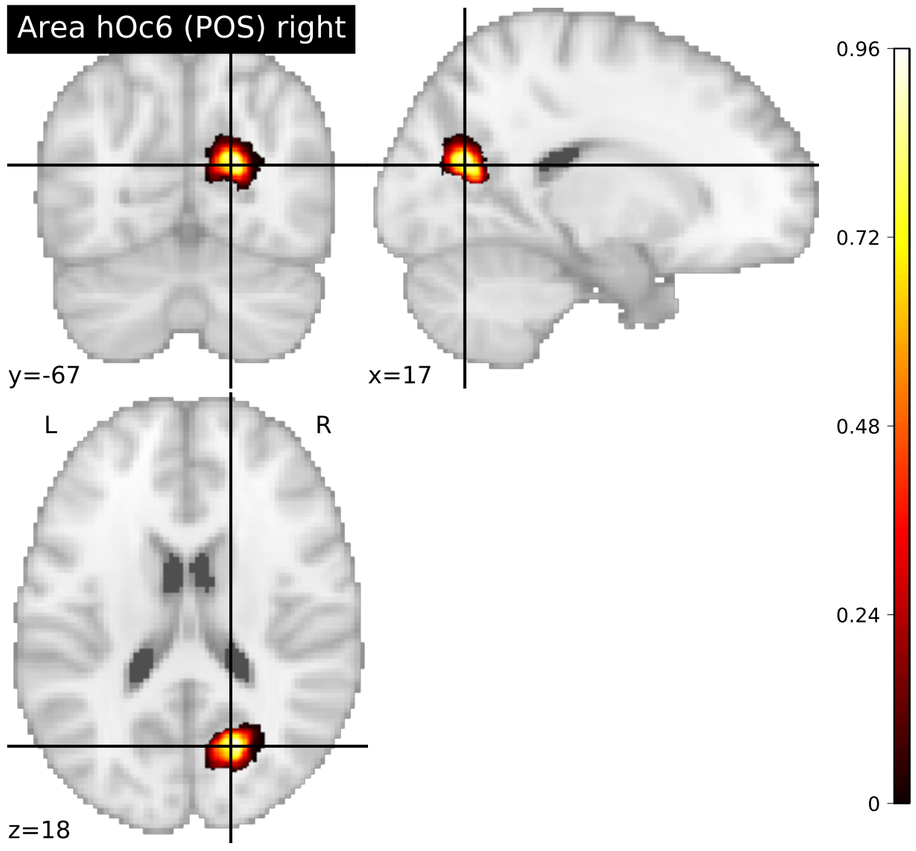
Area hOc6 (POS)

Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral cortex
        └── occiptal lobe
            └── dorsal occipital cortex

This dataset contains the distinct architectonic Area hOc6 (POS) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to Area hOc6 (POS). The probability map of Area hOc6 (POS) is provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Area hOc6 (POS): Richter et al. (2019) [Data set, v7.0] [DOI: 10.25493/ZKR8-P13](https://doi.org/10.25493%2FZKR8-P13) The most probable delineation of Area hOc6 (POS) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D) Amunts et al. (2020) [Data set, v2.4] [DOI: 10.25493/A7Y0-NX9](https://doi.org/10.25493%2FA7Y0-NX9) Amunts et al. (2020) [Data set, v2.5] [DOI: 10.25493/8JKE-M53](https://doi.org/10.25493/8JKE-M53)

Richter, M., Amunts, K., Mohlberg, H., Bludau, S., Eickhoff, S. B., Zilles, K., Caspers, S. (2018). Cytoarchitectonic segregation of human posterior intraparietal and adjacent parieto-occipital sulcus and its relation to visuomotor and cognitive functions. Cerebral Cortex, 29(3), 1305-1327





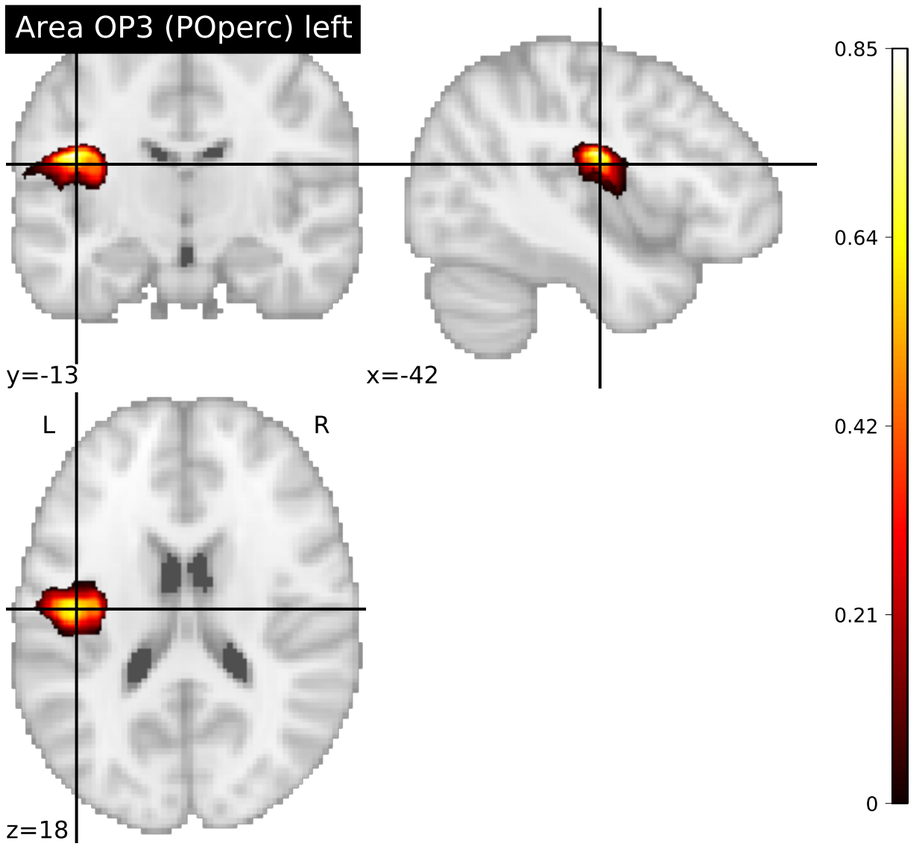
Area OP3 (POperc)

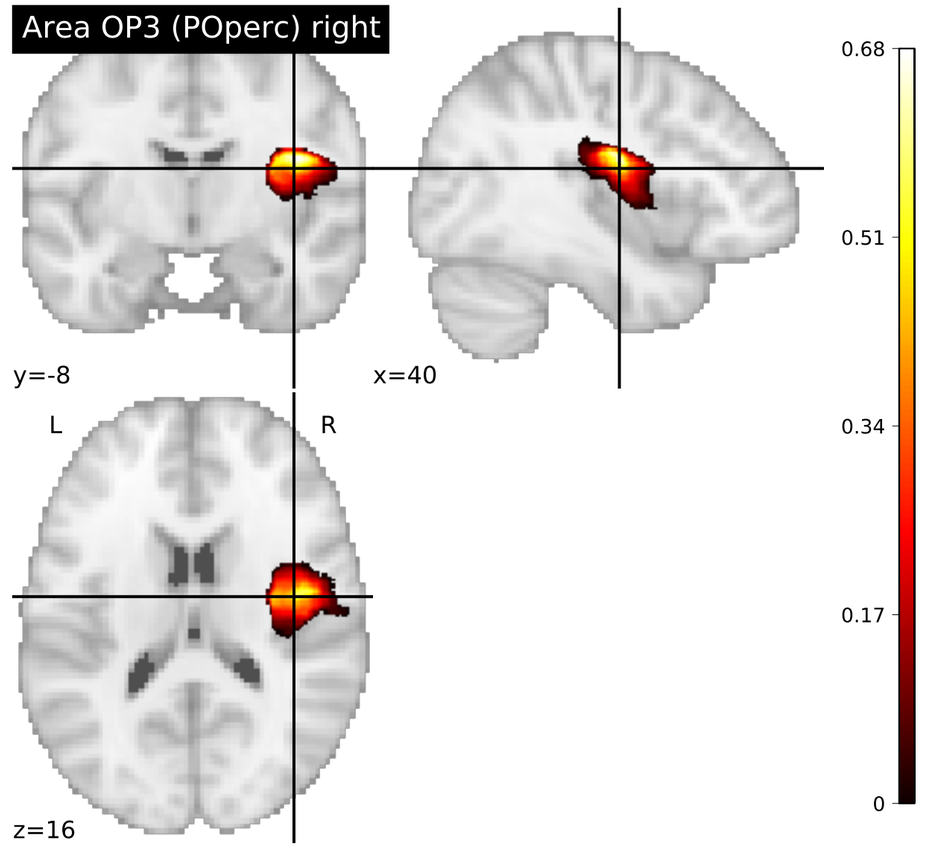
Julich-Brain Cytoarchitectonic Maps 2.9
- telencephalon
  - cerebral cortex
    - parietal lobe
      - parietal operculum

This dataset contains the distinct architectonic Area OP3 (POperc) in the MNI Colin 27 and MNI ICBM 152 reference spaces. As part of the Julich-Brain atlas, the area was identified using classical histological criteria and quantitative cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. Subsequently, the results of the cytoarchitectonic analysis are mapped to the MNI Colin 27 and MNI ICBM 152 reference spaces where each voxel is assigned with the probability to belong to Area OP3 (POperc). The probability map of Area OP3 (POperc) is provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Area OP3 (POperc): Eickhoff et al. (2018) [Data set, v9.2] [DOI: 10.25493/6PRT-2PS](https://doi.org/10.25493%2F6PRT-2PS) Eickhoff et al. (2019) [Data set, v11.0] [DOI: 10.25493/V715-BQU](https://doi.org/10.25493%2FV715-BQU) The most probable delineation of Area OP3 (POperc) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.13] [DOI: 10.25493/Q3ZS-NV6](https://doi.org/10.25493%2FQ3ZS-NV6) Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D)

Eickhoff, S. B., Amunts, K., Mohlberg, H., & Zilles, K. (2005). The Human Parietal Operculum. II. Stereotaxic Maps and Correlation with Functional Imaging Results. Cerebral Cortex, 16(2), 268–279.

Eickhoff, S. B., Schleicher, A., Zilles, K., & Amunts, K. (2005). The Human Parietal Operculum. I. Cytoarchitectonic Mapping of Subdivisions. Cerebral Cortex, 16(2), 254–267.



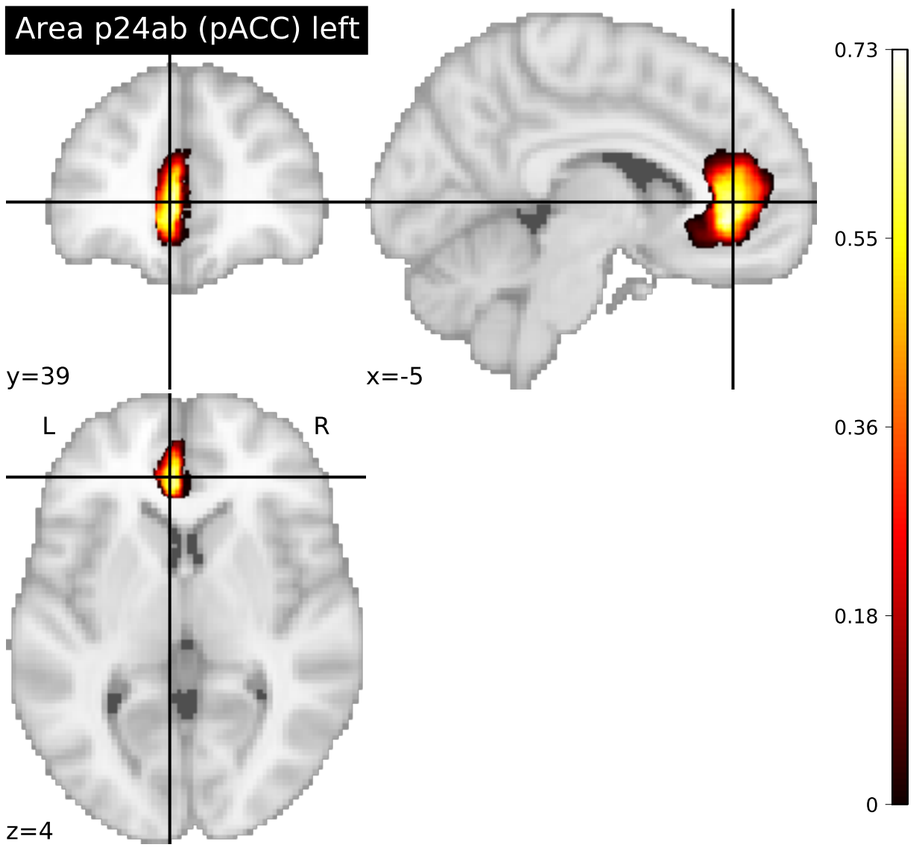


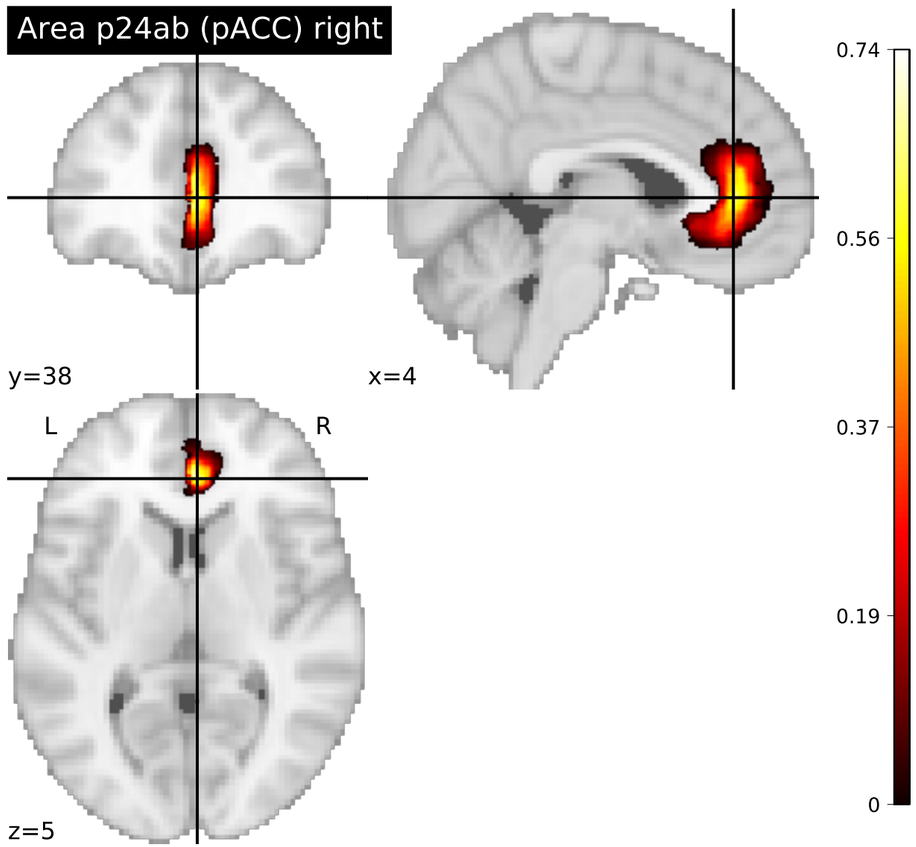
Area p24ab (pACC)

Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral cortex
        └── limbic lobe
            └── cingulate gyrus, frontal part

This dataset contains the distinct architectonic areas p24a and p24b (combined to a single probability map named Area p24ab (pACC)) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to Area p24ab (pACC). The probability map of Area p24ab (pACC) is provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Area p24ab (pACC): Palomero-Gallagher et al. (2019) [Data set, v16.0] [DOI: 10.25493/80YK-SN0](https://doi.org/10.25493%2F80YK-SN0) The most probable delineation of Area p24ab (pACC) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D)

Palomero-Gallagher, N., Hoffstaedter, F., Mohlberg, H., Eickhoff, S.B., Amunts, K., Zilles, K. (2018). Human Pregenual Anterior Cingulate Cortex: Structural, Functional, and Connectional Heterogeneity. Cereb Cortex

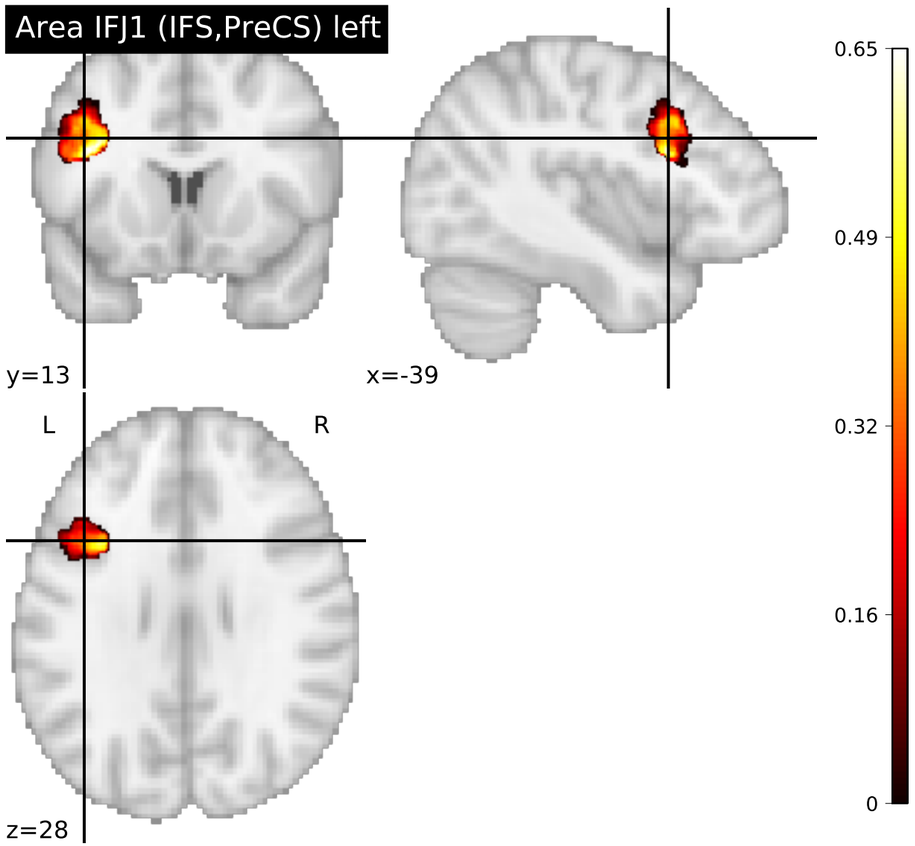




Area IFJ1 (IFS,PreCS)

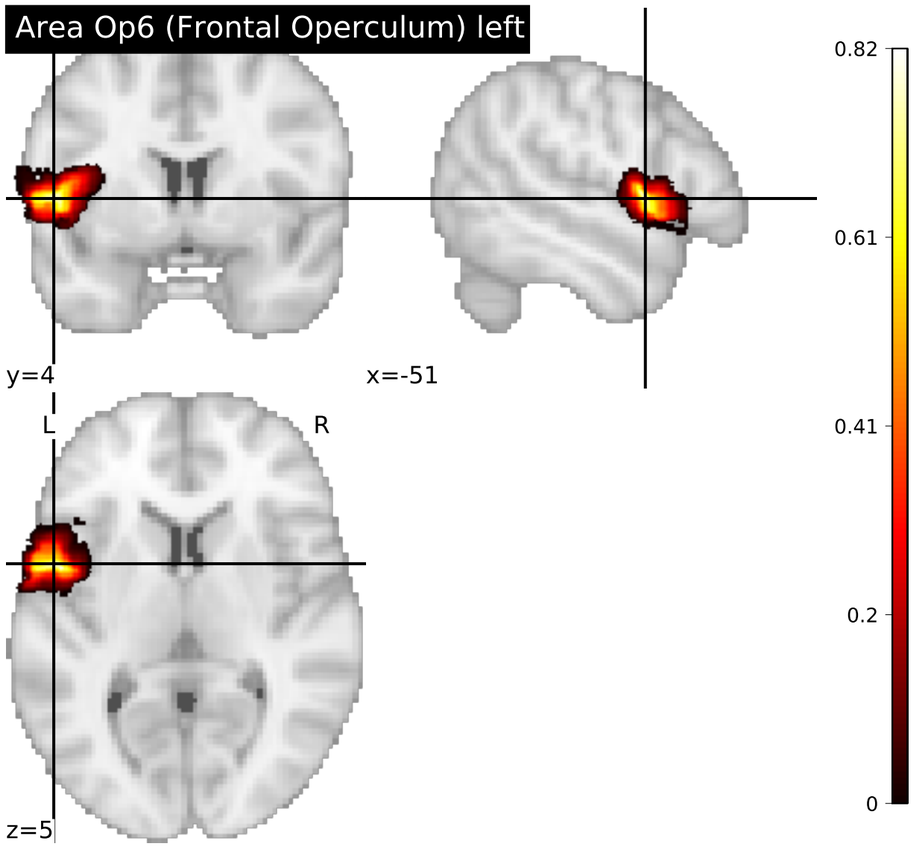
Julich-Brain Cytoarchitectonic Maps 2.9
- telencephalon
  - cerebral cortex
    - frontal lobe
      - inferior frontal sulcus

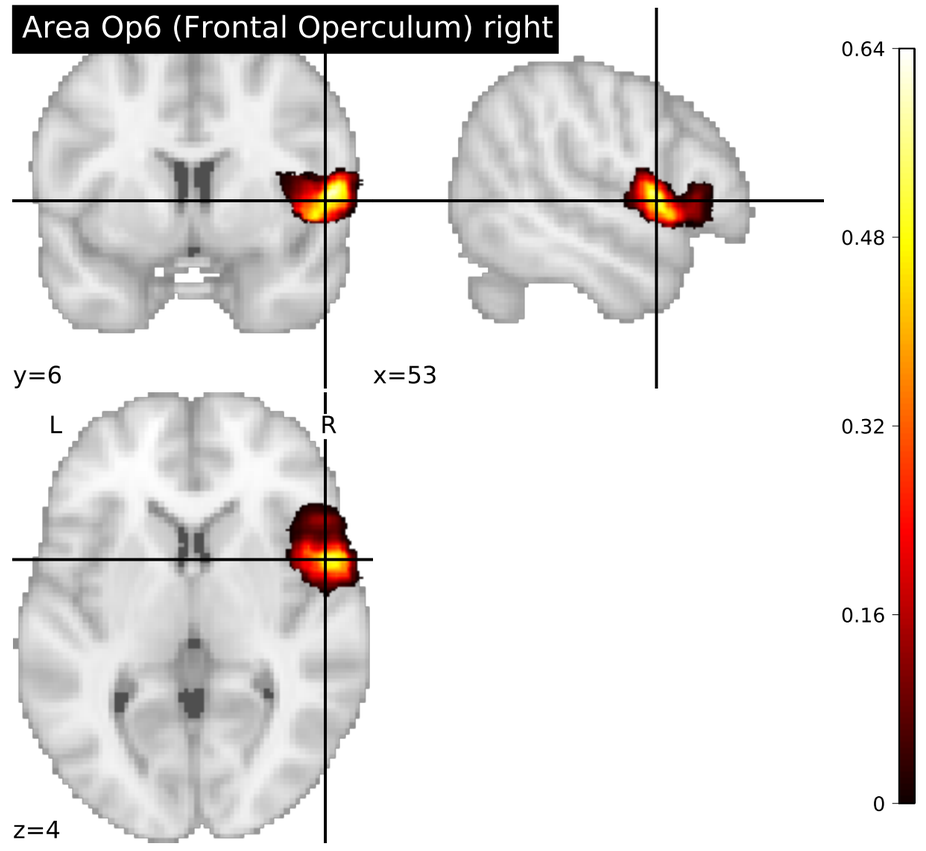
This dataset contains cytoarchitectonic maps of Area ifj1 (IFS/PreCS) in the BigBrain. The mappings were created using cytoarchitectonic criteria applied on digitized histological sections of 1 µm resolution, cut in coronal plane. Areal borders have been detected by an oberserver-independent border definition (Schleicher 2000). Mappings are available on sections of the BigBrain and have been transformed to the 3D reconstructed BigBrain space using the transformations used in Amunts et al. 2013. From these delineations, a preliminary 3D map of Area ifj1 (IFS/PreCS) has been created by simple interpolation of the coronal contours in the 3D anatomical space of the Big Brain. This map gives a first impression of the location of this area in the Big Brain, and can be viewed in the atlas viewer using the URL below.



Area Op6 (Frontal Operculum)

Julich-Brain Cytoarchitectonic Maps 2.9
- telencephalon
  - cerebral cortex
    - frontal lobe
      - frontal operculum



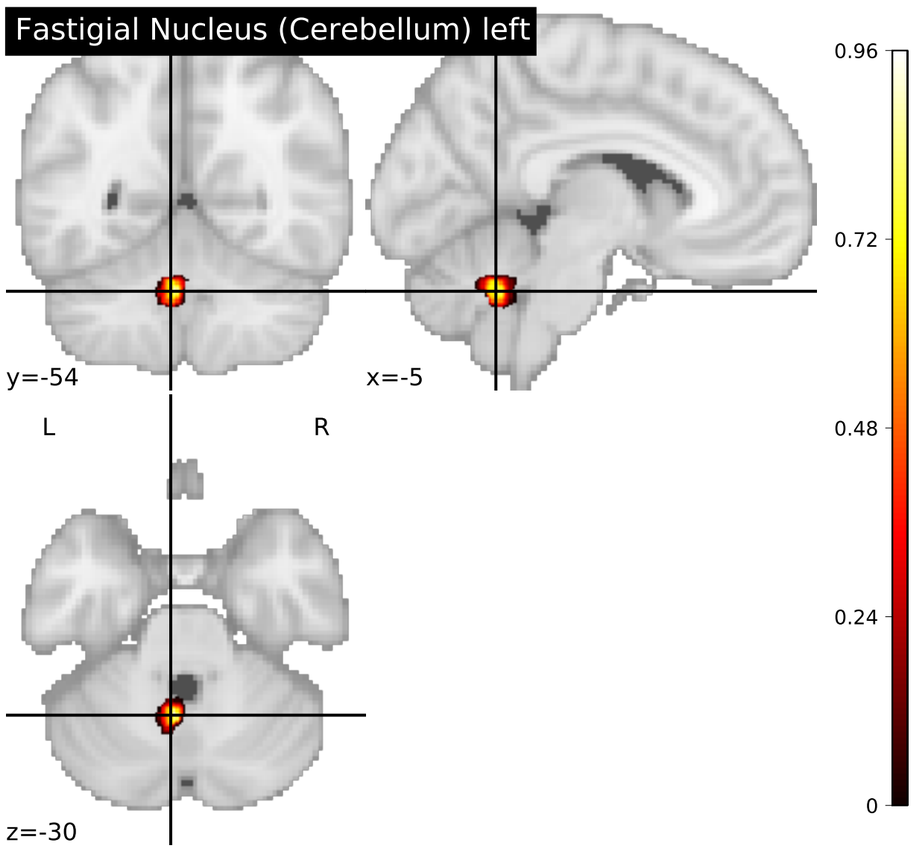


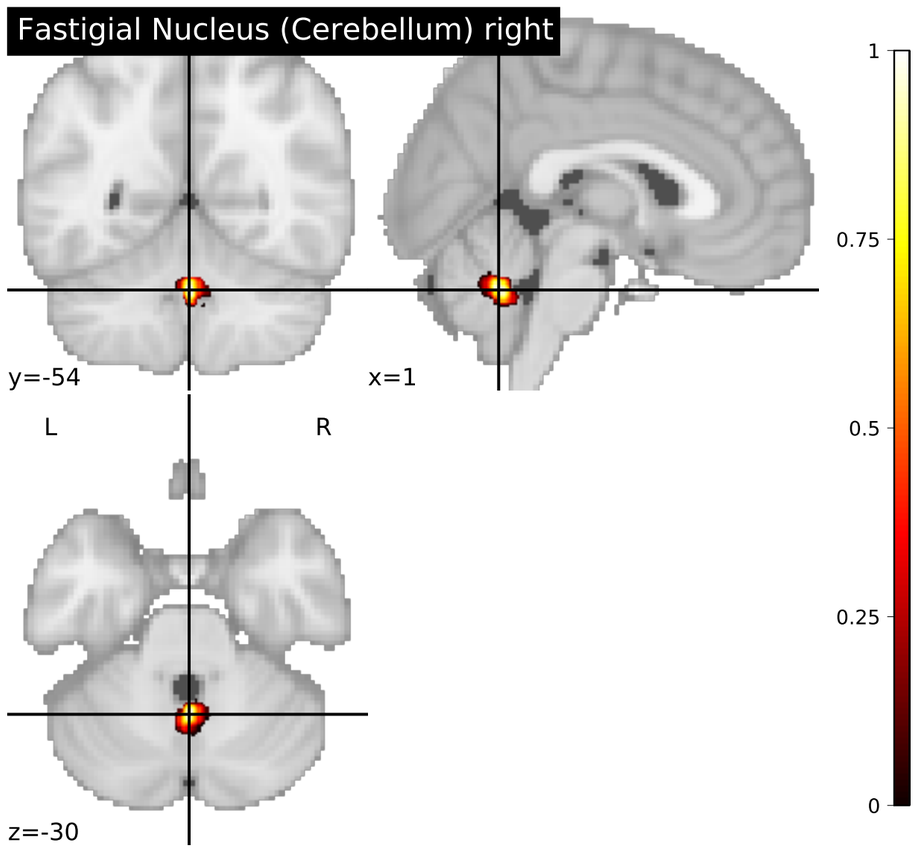
Fastigial Nucleus (Cerebellum)

Julich-Brain Cytoarchitectonic Maps 2.9
- metencephalon
  - cerebellum
    - cerebellar nuclei
      - fastigial nucleus

This dataset contains the distinct architectonic Fastigial Nucleus (Cerebellum) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to Fastigial Nucleus (Cerebellum). The probability map of Fastigial Nucleus (Cerebellum) is provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Fastigial Nucleus (Cerebellum): Tellmann et al. (2018) [Data set, v6.0] [DOI: 10.25493/JNN1-V3Q](https://doi.org/10.25493%2FJNN1-V3Q) The most probable delineation of Fastigial Nucleus (Cerebellum) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.13] [DOI: 10.25493/Q3ZS-NV6](https://doi.org/10.25493%2FQ3ZS-NV6) Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D) Amunts et al. (2020) [Data set, v2.4] [DOI: 10.25493/A7Y0-NX9](https://doi.org/10.25493%2FA7Y0-NX9) Amunts et al. (2020) [Data set, v2.5] [DOI: 10.25493/8JKE-M53](https://doi.org/10.25493/8JKE-M53) Amunts et al. (2021) [Data set, v2.6] [DOI: 10.25493/KJQN-AM0](https://doi.org/10.25493%2FKJQN-AM0)

Tellmann, S., Bludau, S., Eickhoff, S., Mohlberg, H., Minnerop, M., & Amunts, K. (2015). Cytoarchitectonic mapping of the human brain cerebellar nuclei in stereotaxic space and delineation of their co-activation patterns. Frontiers in Neuroanatomy, 09.



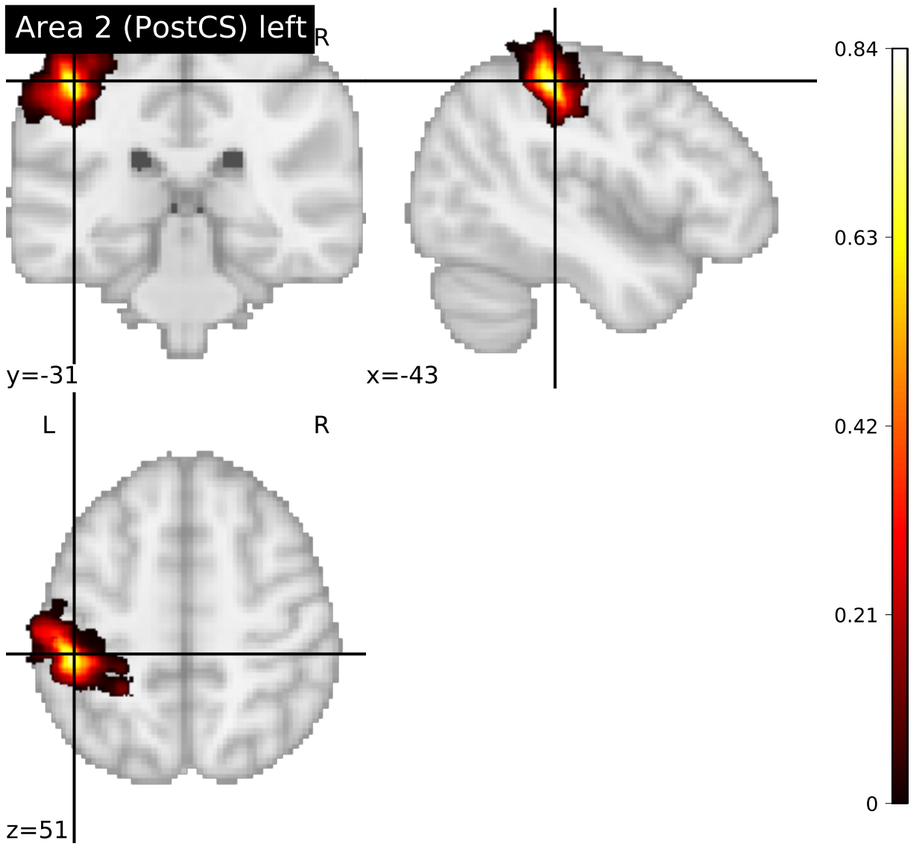


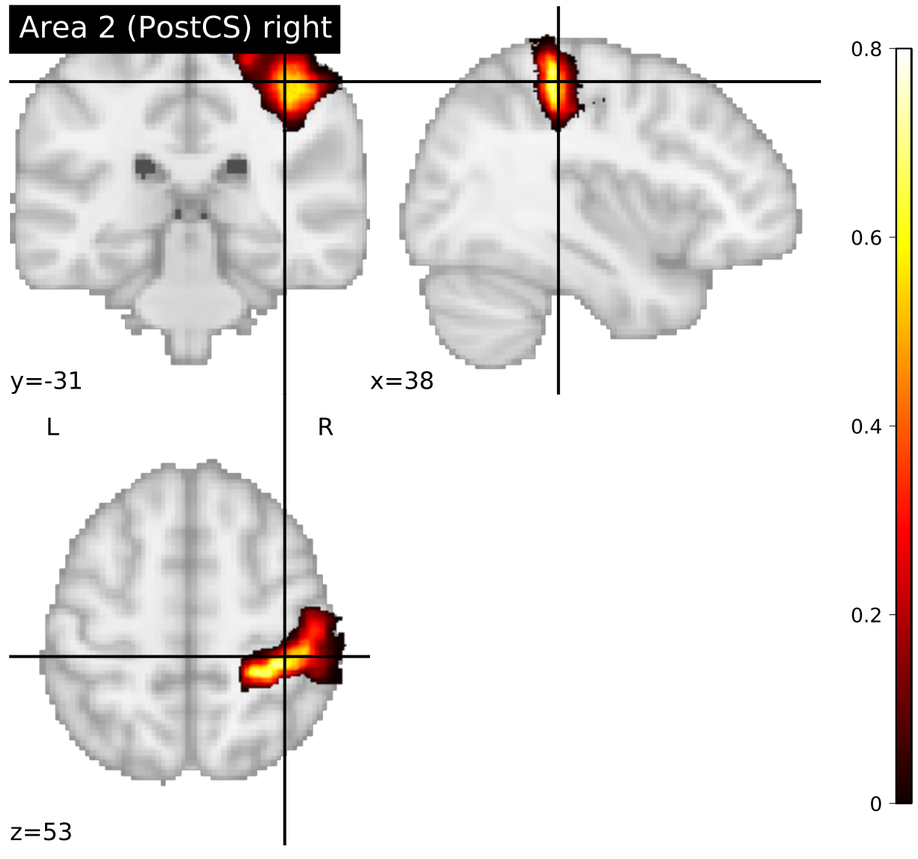
Area 2 (PostCS)

Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral cortex
        └── parietal lobe
            └── postcentral gyrus

This dataset contains the distinct architectonic Area 2 (PostCS) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to Area 2 (PostCS). The probability map of Area 2 (PostCS) are provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Area 2 (PostCS): Grefkes et al. (2018) [Data set, v3.2] [DOI: 10.25493/JZP0-Q97](https://doi.org/10.25493%2FJZP0-Q97) The most probable delineation of Area 2 (PostCS) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.13] [DOI: 10.25493/Q3ZS-NV6](https://doi.org/10.25493%2FQ3ZS-NV6) Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D)

Grefkes, C., Geyer, S., Schormann, T., Roland, P., & Zilles, K. (2001). Human Somatosensory Area 2: Observer-Independent Cytoarchitectonic Mapping, Interindividual Variability, and Population Map. NeuroImage, 14(3), 617–631.





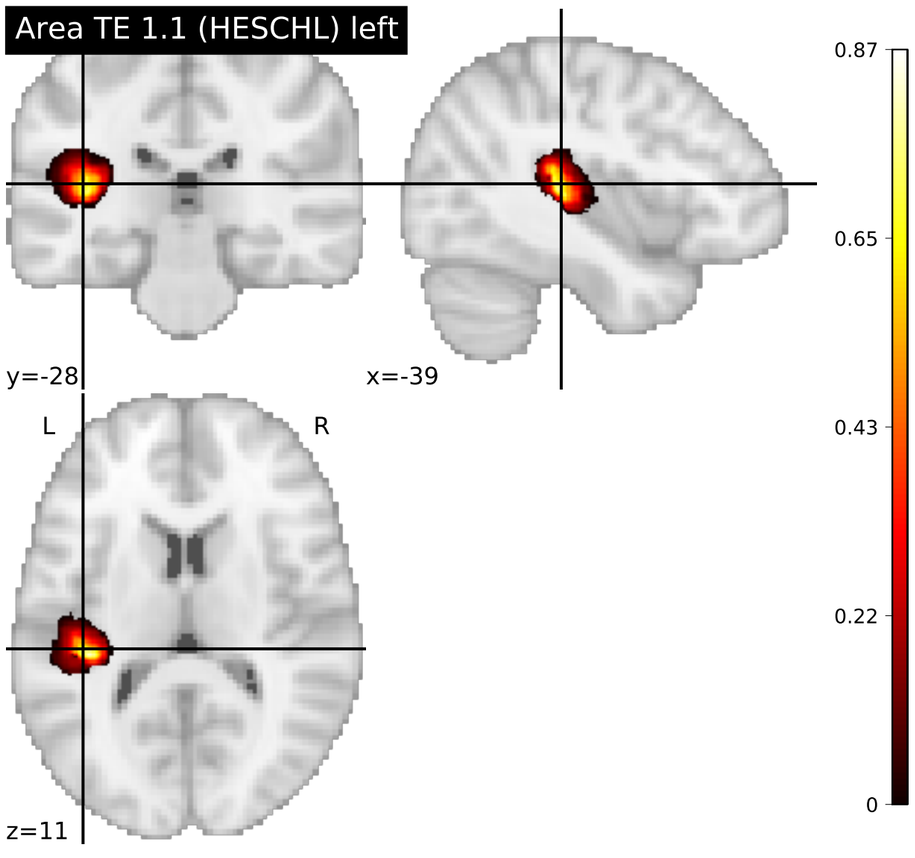
Area TE 1.1 (HESCHL)

Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
  └── cerebral cortex
    └── temporal lobe
      └── Heschl's gyrus

This dataset contains the distinct architectonic Area TE 1.1 (HESCHL) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to Area TE 1.1 (HESCHL). The probability map of Area TE 1.1 (HESCHL) is provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Area TE 1.1 (HESCHL): Morosan et al. (2018) [Data set, v5.0] [DOI: 10.25493/55TY-YS8](https://doi.org/10.25493%2F55TY-YS8) The most probable delineation of Area TE 1.1 (HESCHL) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.13] [DOI: 10.25493/Q3ZS-NV6](https://doi.org/10.25493%2FQ3ZS-NV6) Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D)

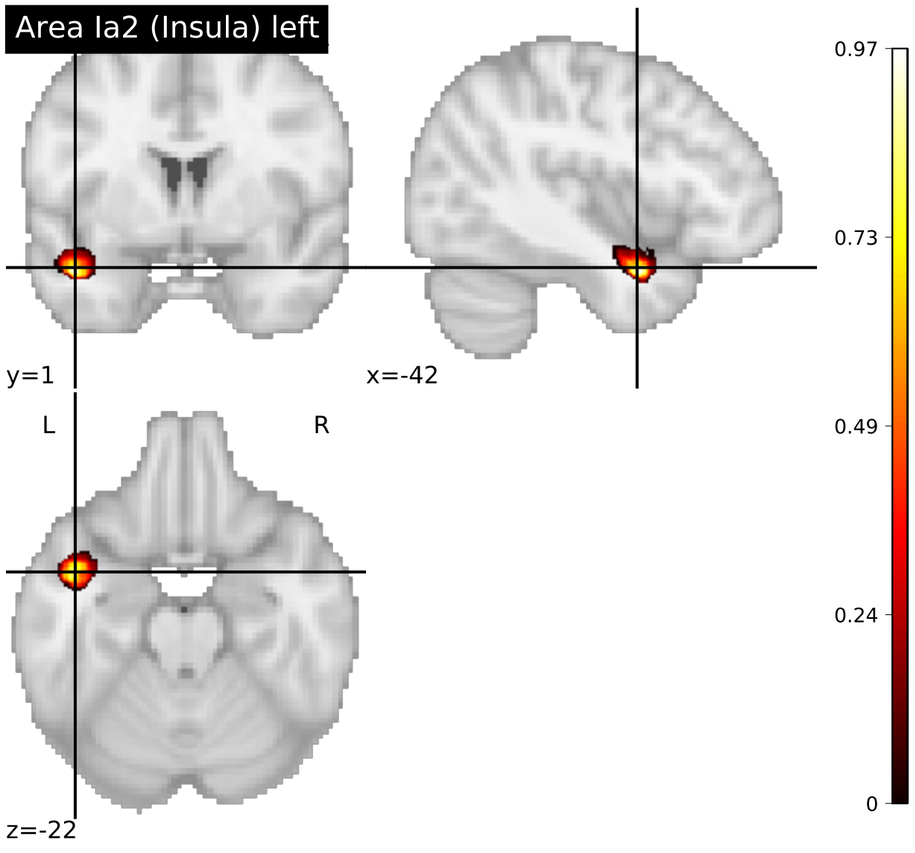
Morosan, P., Rademacher, J., Schleicher, A., Amunts, K., Schormann, T., & Zilles, K. (2001). Human Primary Auditory Cortex: Cytoarchitectonic Subdivisions and Mapping into a Spatial Reference System. NeuroImage, 13(4), 684–701.

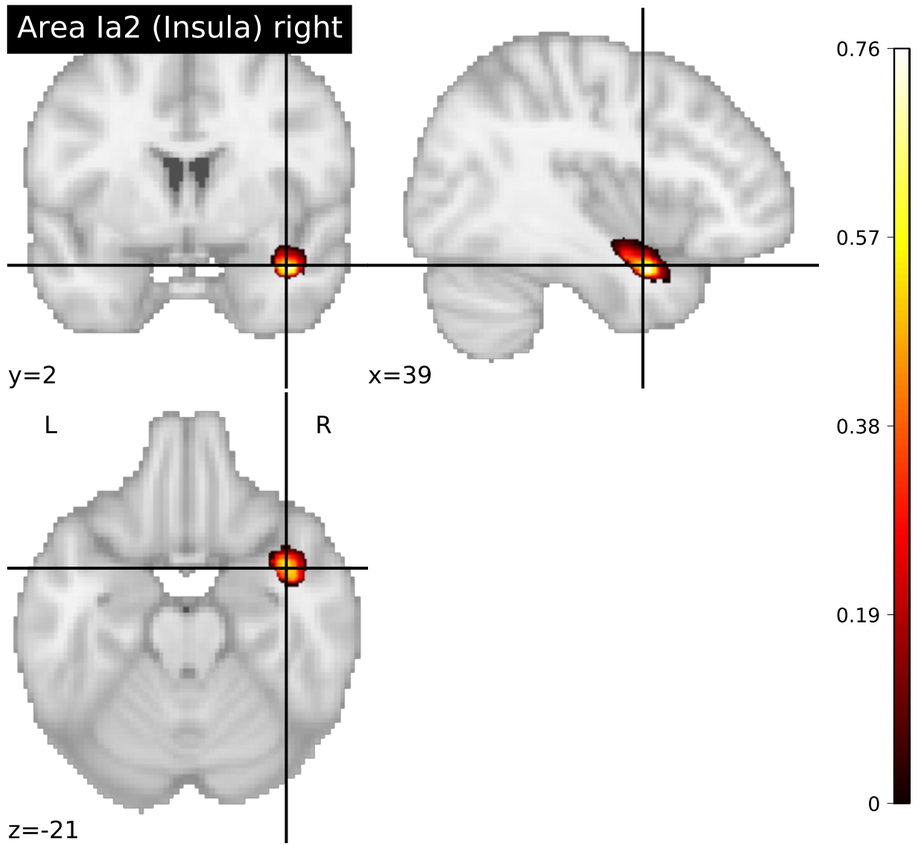
Rademacher, J., Morosan, P., Schormann, T., Schleicher, A., Werner, C., Freund, H.-J., & Zilles, K. (2001). Probabilistic Mapping and Volume Measurement of Human Primary Auditory Cortex. NeuroImage, 13(4), 669–683.



Area Ia2 (Insula)

Julich-Brain Cytoarchitectonic Maps 2.9
- telencephalon
  - cerebral cortex
    - insula
      - agranular insula



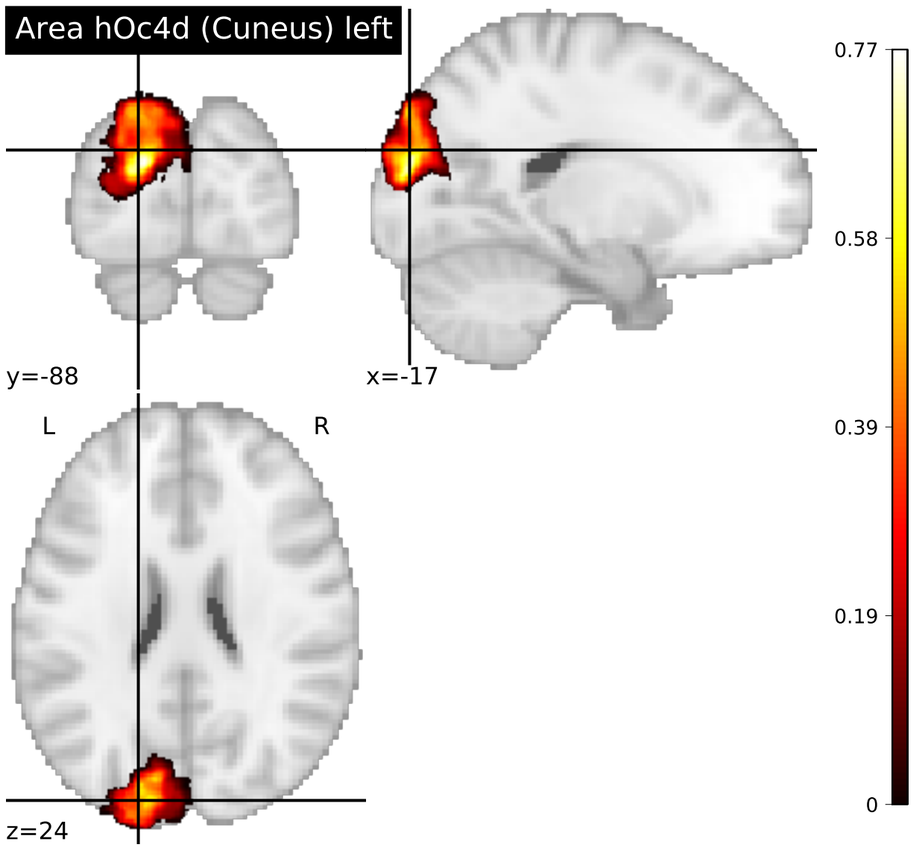


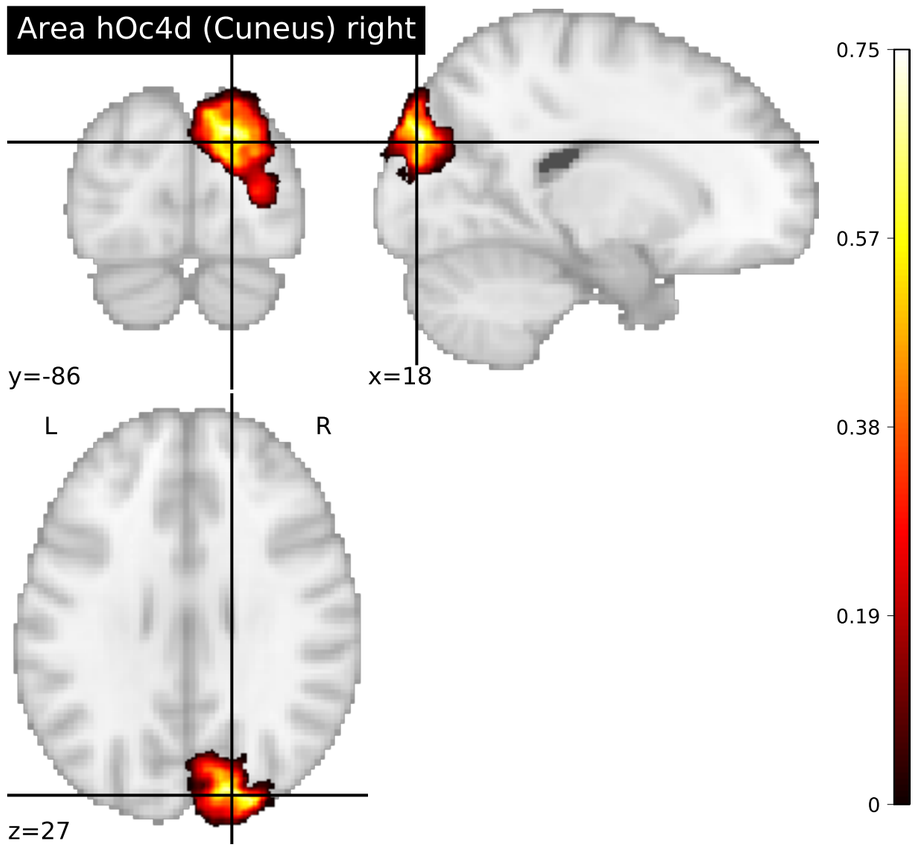
Area hOc4d (Cuneus)

Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral cortex
        └── occiptal lobe
            └── dorsal occipital cortex

This dataset contains the distinct architectonic Area hOc4d (Cuneus) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to Area hOc4d (Cuneus). The probability map of Area hOc4d (Cuneus) is provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Area hOc4d (Cuneus): Kujovic et al. (2018) [Data set, v2.2] [DOI: 10.25493/KQ4Y-Q4M](https://doi.org/10.25493%2FKQ4Y-Q4M) The most probable delineation of Area hOc4d (Cuneus) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.13] [DOI: 10.25493/Q3ZS-NV6](https://doi.org/10.25493%2FQ3ZS-NV6) Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D)

Kujovic, M., Zilles, K., Malikovic, A., Schleicher, A., Mohlberg, H., Rottschy, C.,… Amunts, K. (2012). Cytoarchitectonic mapping of the human dorsal extrastriate cortex. Brain Structure and Function, 218(1), 157–172.





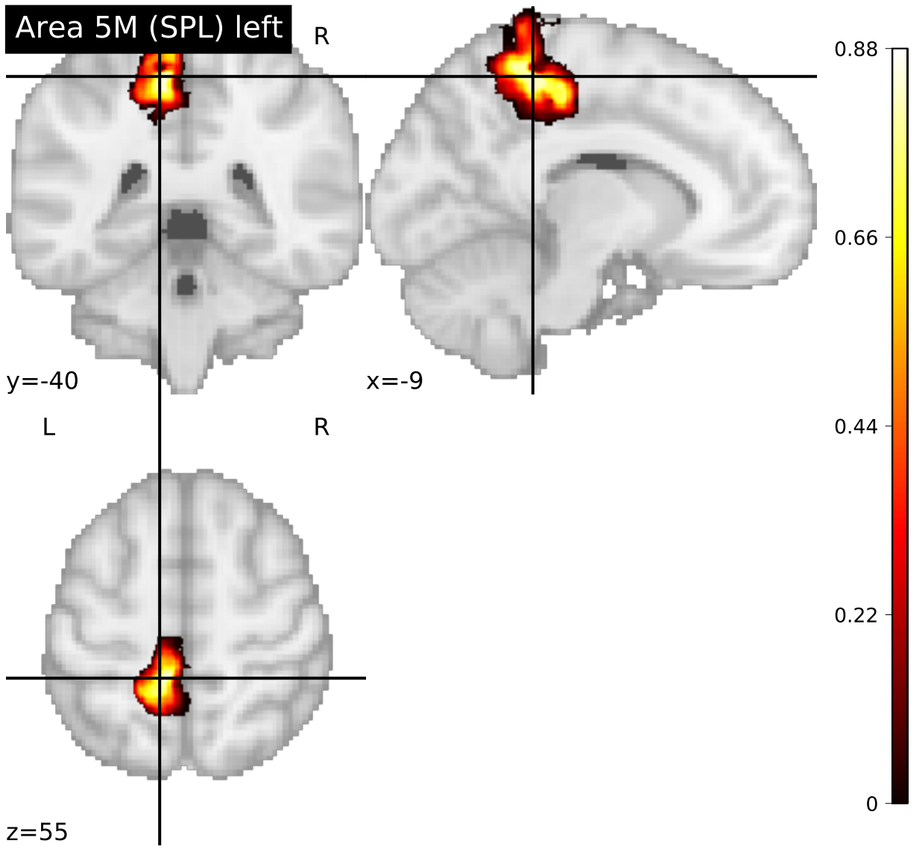
Area 5M (SPL)

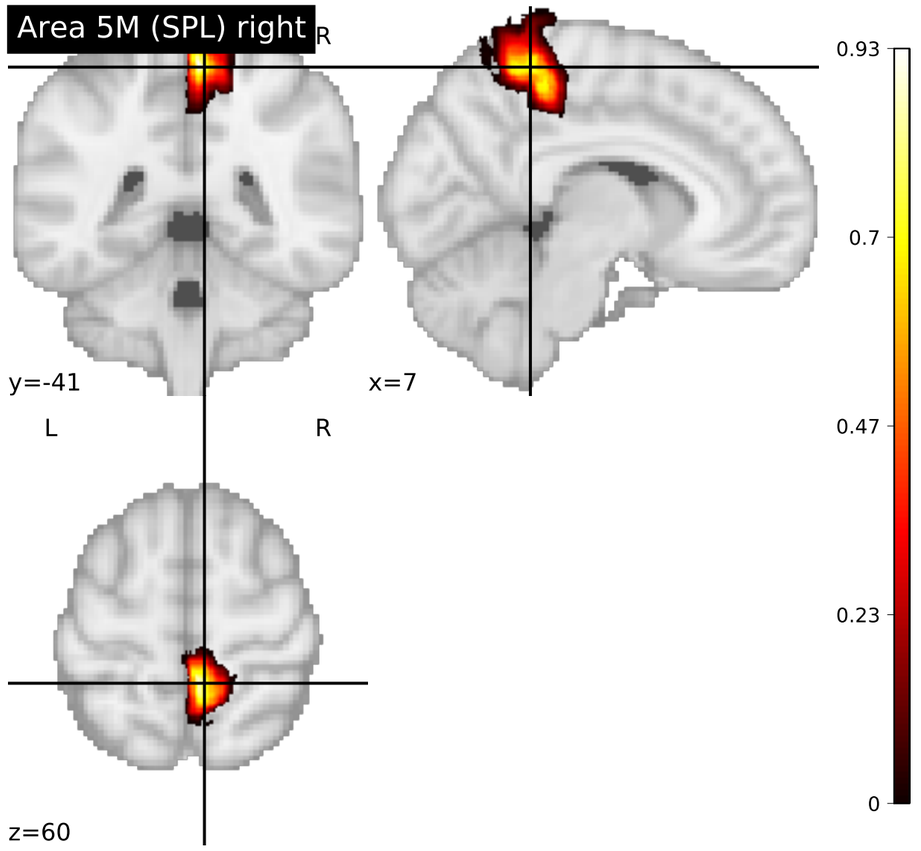
Julich-Brain Cytoarchitectonic Maps 2.9
- telencephalon
  - cerebral cortex
    - parietal lobe
      - superior parietal lobule

This dataset contains the distinct architectonic Area 5M (SPL) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to Area 5M (SPL). The probability map of Area 5M (SPL) are provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Area 5M (SPL): Scheperjans et al. (2018) [Data set, v8.2] [DOI: 10.25493/CG41-Q6U](https://doi.org/10.25493%2FCG41-Q6U) The most probable delineation of Area 5M (SPL) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.13] [DOI: 10.25493/Q3ZS-NV6](https://doi.org/10.25493%2FQ3ZS-NV6) Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D)

Scheperjans, F., Eickhoff, S. B., Hoemke, L., Mohlberg, H., Hermann, K., Amunts, K., & Zilles, K. (2008). Probabilistic Maps, Morphometry, and Variability of Cytoarchitectonic Areas in the Human Superior Parietal Cortex. Cerebral Cortex, 18(9), 2141–2157.

Scheperjans, F., Hermann, K., Eickhoff, S. B., Amunts, K., Schleicher, A., & Zilles, K. (2007). Observer-Independent Cytoarchitectonic Mapping of the Human Superior Parietal Cortex. Cerebral Cortex, 18(4), 846–867.



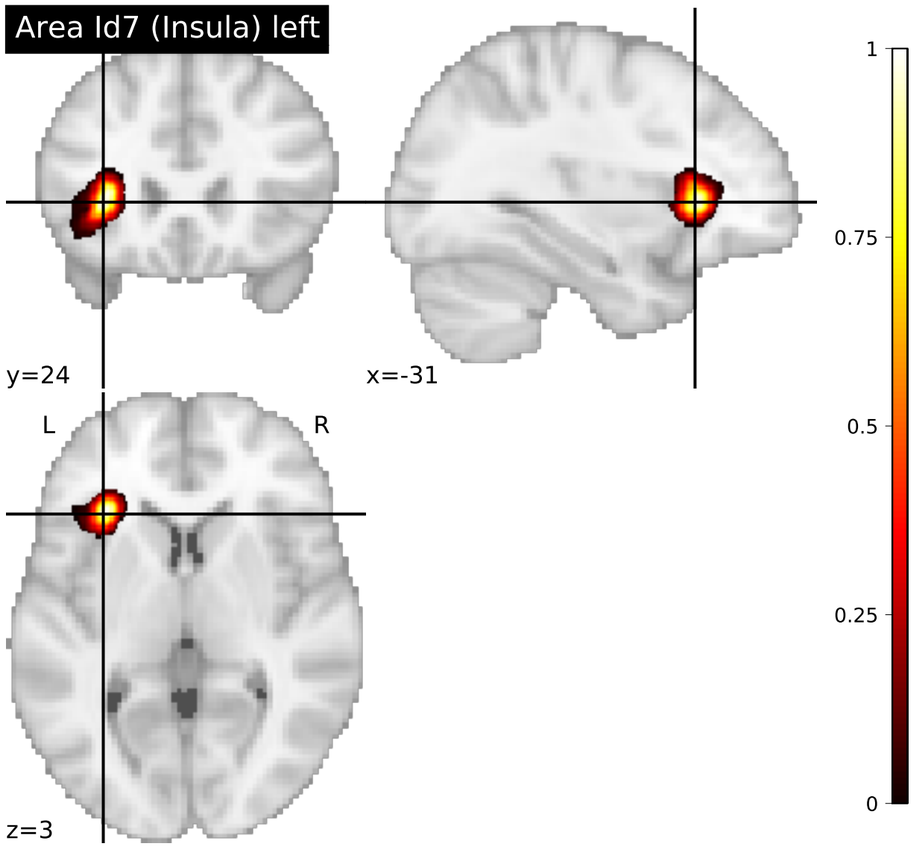


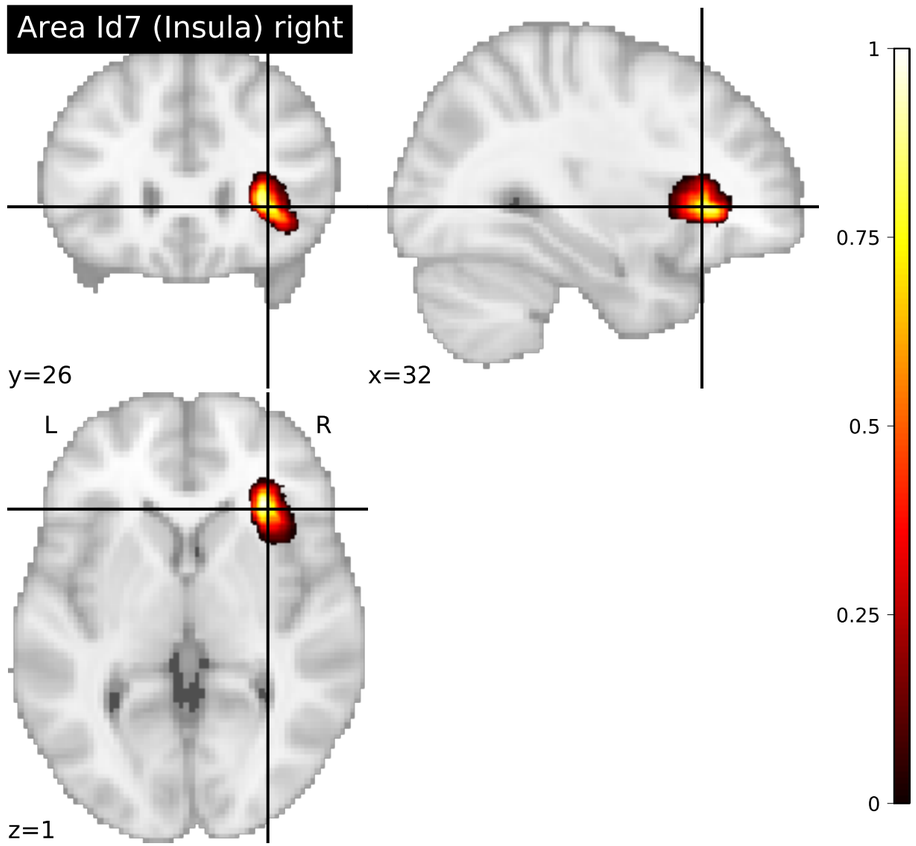
Area Id7 (Insula)

Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral cortex
        └── insula
            └── dysgranular insula

This dataset contains the distinct architectonic Area Id7 (Insula) in the MNI Colin 27 and MNI ICBM 152 reference spaces. As part of the Julich-Brain atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains, obtained from the body donor program of the University of Düsseldorf. Subsequently, the results of the cytoarchitectonic analysis are mapped to the MNI Colin 27 and MNI ICBM 152 reference spaces, where each voxel is assigned with the probability to belong to Area Id7 (Insula). The probability map of Area Id7 (Insula) is provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Area Id7 (Insula): Amunts et al. (2019) [Data set, v6.0] [DOI: 10.25493/B2E3-JQR](https://doi.org/10.25493%2FB2E3-JQR) The most probable delineation of Area Id7 (Insula) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D)

Grodzinsky, Y., Deschamps, I., Pieperhoff, P., Iannilli, F., Agmon, G., Loewenstein, Y., Amunts, K. (2020) Logical negation mapped onto the brain. Brain Structure and Function, 225(1):19-31





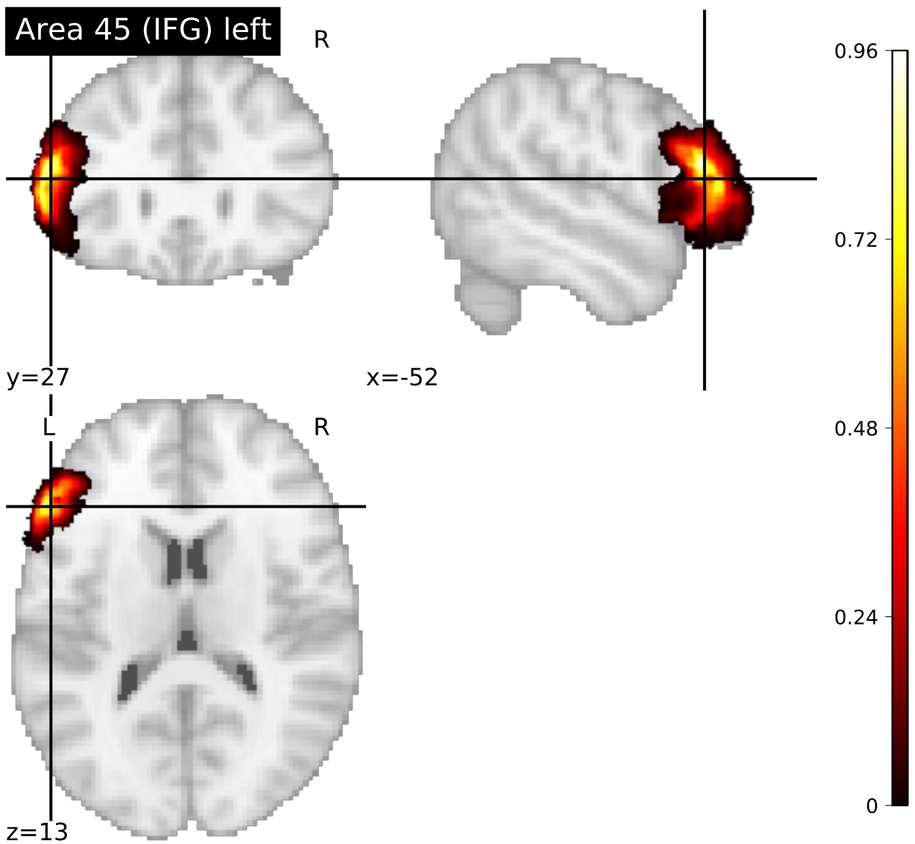
Area 45 (IFG)

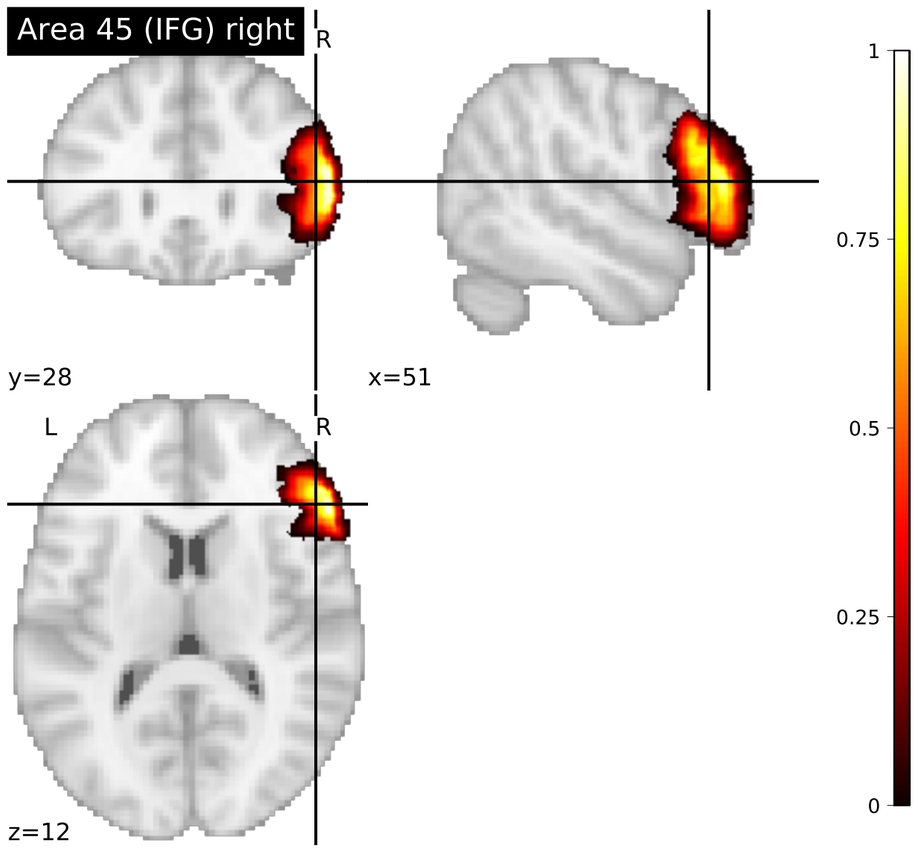
Julich-Brain Cytoarchitectonic Maps 2.9
- telencephalon
  - cerebral cortex
    - frontal lobe
      - inferior frontal gyrus

This dataset contains the distinct architectonic Area 45 (IFG) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to Area 45 (IFG). The probability map of Area 45 (IFG) are provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Area 45 (IFG): Amunts et al. (2018) [Data set, v7.2] [DOI: 10.25493/J2KZ-AZW](https://doi.org/10.25493%2FJ2KZ-AZW) The most probable delineation of Area 45 (IFG) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.13] [DOI: 10.25493/Q3ZS-NV6](https://doi.org/10.25493%2FQ3ZS-NV6) Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D)

Amunts, K., Schleicher, A., Bürgel, U., Mohlberg, H., Uylings, H. B. M., & Zilles, K. (1999). Broca's region revisited: Cytoarchitecture and intersubject variability. The Journal of Comparative Neurology, 412(2), 319–341.

Amunts, K., Weiss, P. H., Mohlberg, H., Pieperhoff, P., Eickhoff, S., Gurd, J. M.,… Zilles, K. (2004). Analysis of neural mechanisms underlying verbal fluency in cytoarchitectonically defined stereotaxic space—The roles of Brodmann areas 44 and 45. NeuroImage, 22(1), 42–56.





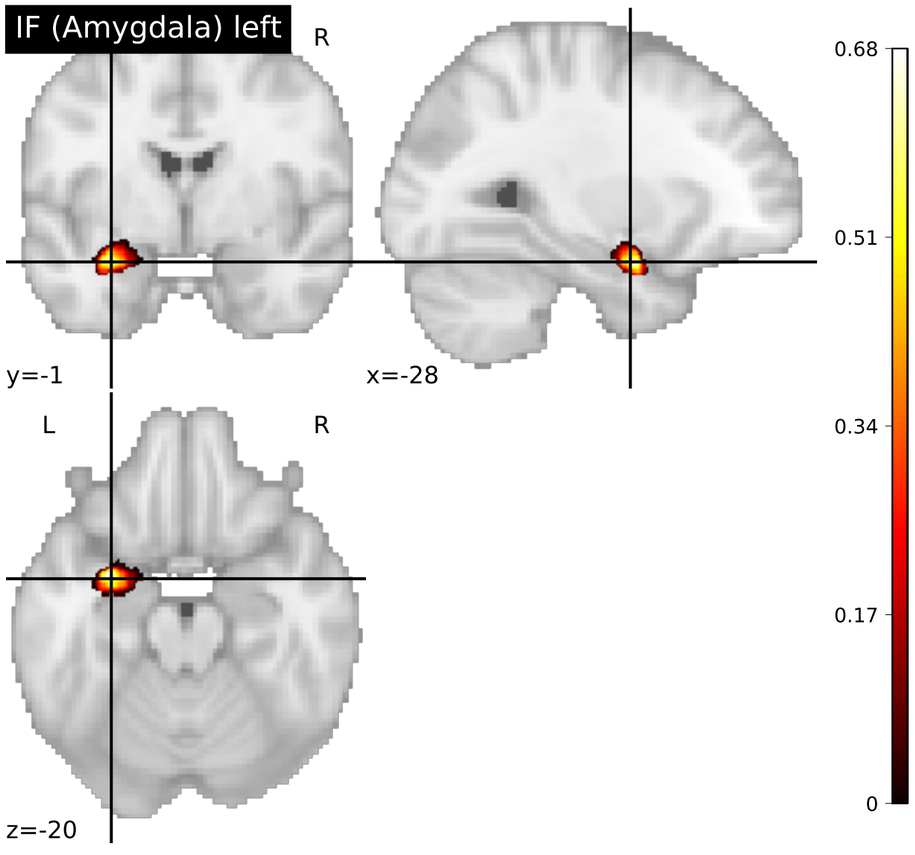
IF (Amygdala)

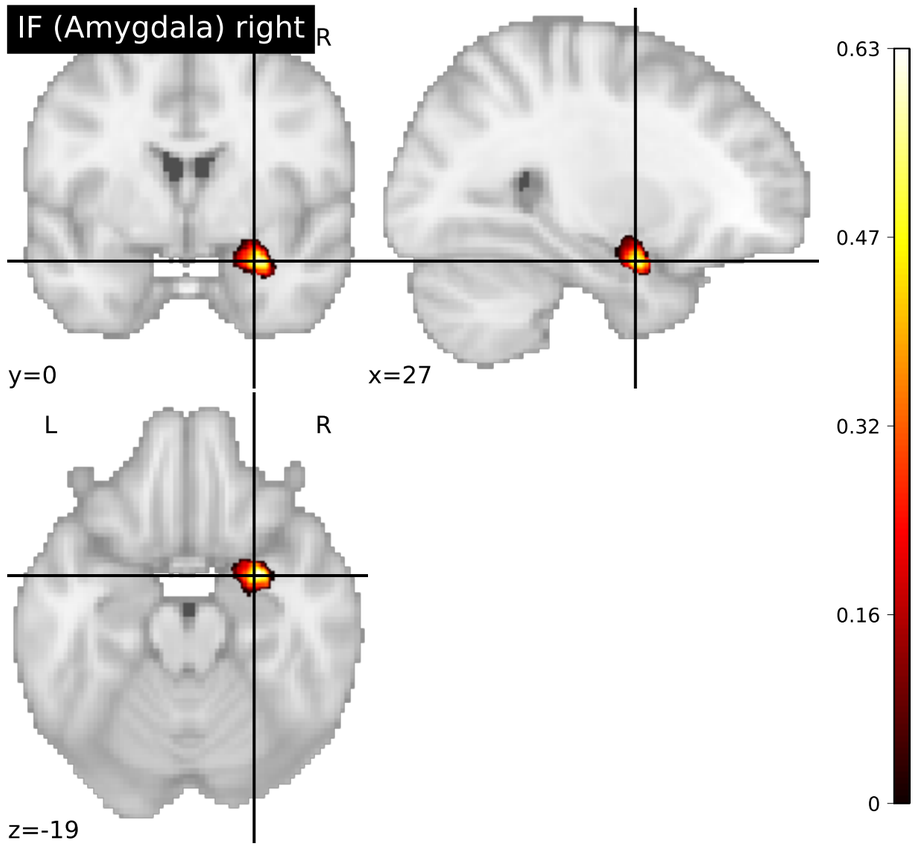
Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
  └── cerebral nuclei
    └── amygdala
      └── fiber masses

This dataset contains the distinct architectonic Area IF (Amygdala) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to Area IF (Amygdala). The probability map of Area IF (Amygdala) are provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. The most probable delineation of Area IF (Amygdala) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D)

Kedo, O., Zilles, K., Palomero-Gallagher, N., Schleicher, A., Mohlberg, H., Bludau, S., Amunts, K. (2018). Receptor-driven, multimodal mapping of the human amygdala. Brain Struct Funct., 223(4):1637-1666.

Amunts, K., Kedo, O., Kindler, M., Pieperhoff, P., Mohlberg, H., Shah, N. J.,... Zilles, K. (2005). Cytoarchitectonic mapping of the human amygdala, hippocampal region and entorhinal cortex: intersubject variability and probability maps. Anatomy and Embryology, 210(5-6), 343–352.



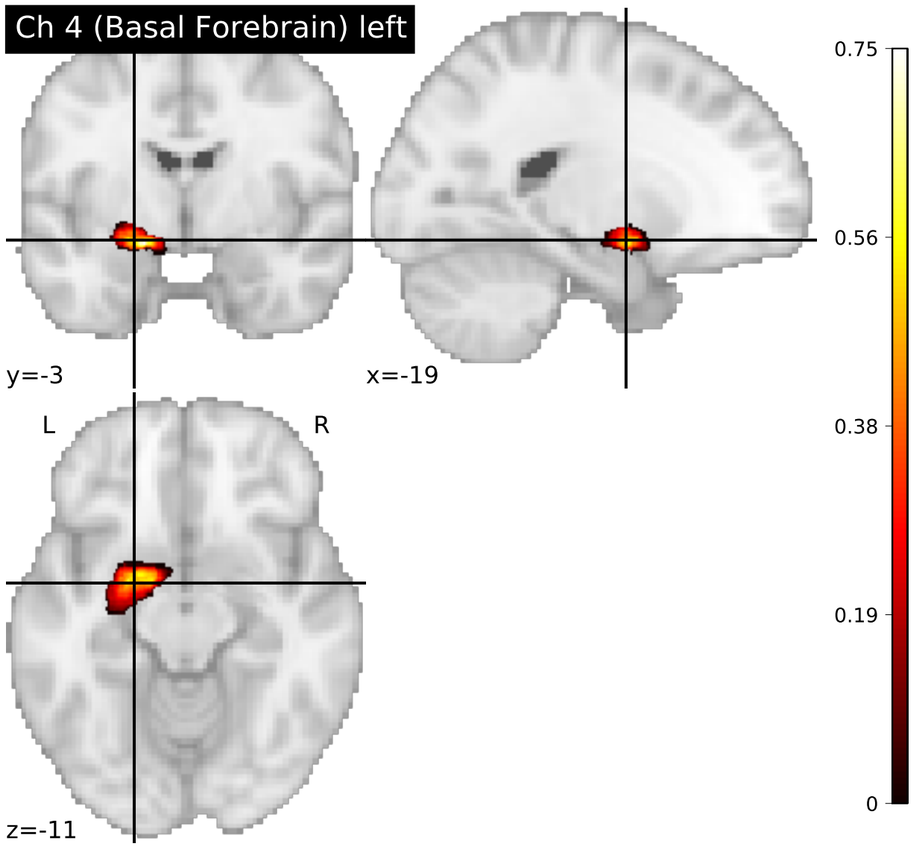


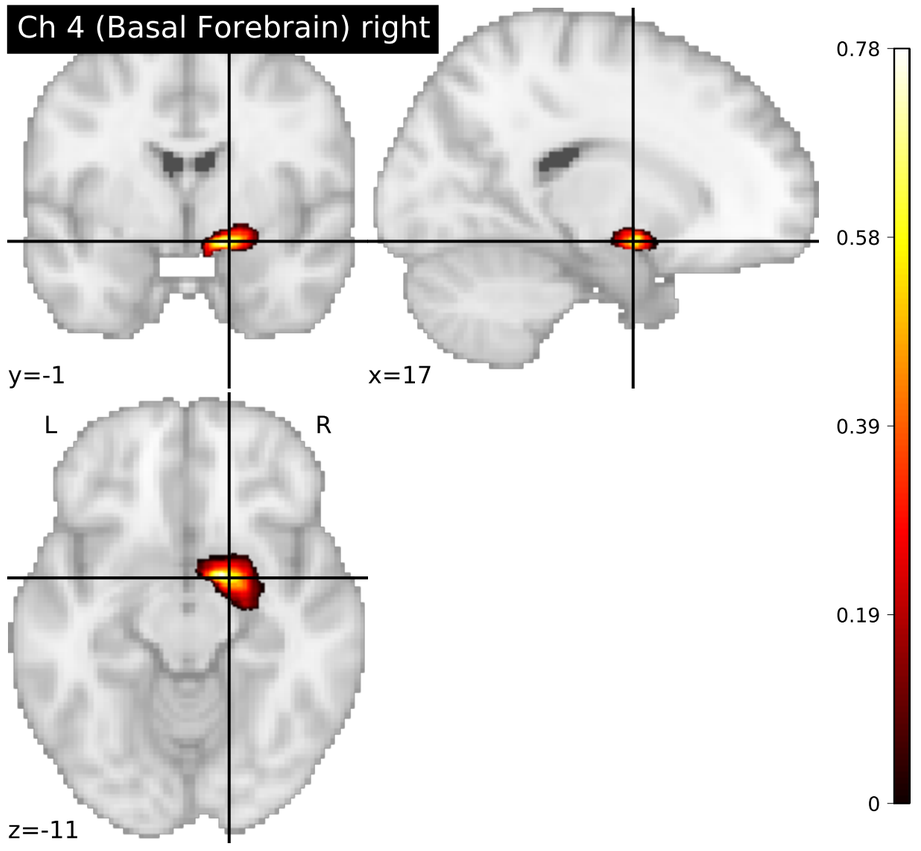
Ch 4 (Basal Forebrain)

Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral nuclei
        └── basal forebrain
            └── sublenticular part of basal forebrain

This dataset contains the distinct architectonic Ch 4 (Basal Forebrain) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to Ch 4 (Basal Forebrain). The probability map of Ch 4 (Basal Forebrain) is provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Ch 4 (Basal Forebrain): Zaborszky et al. (2018) [Data set, v4.0] [DOI: 10.25493/BWZ1-5MV](https://doi.org/10.25493%2FBWZ1-5MV) The most probable delineation of Ch 4 (Basal Forebrain) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.13] [DOI: 10.25493/Q3ZS-NV6](https://doi.org/10.25493%2FQ3ZS-NV6) Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D) Amunts et al. (2020) [Data set, v2.4] [DOI: 10.25493/A7Y0-NX9](https://doi.org/10.25493%2FA7Y0-NX9) Amunts et al. (2020) [Data set, v2.5] [DOI: 10.25493/8JKE-M53](https://doi.org/10.25493/8JKE-M53) Amunts et al. (2021) [Data set, v2.6] [DOI: 10.25493/KJQN-AM0](https://doi.org/10.25493%2FKJQN-AM0)

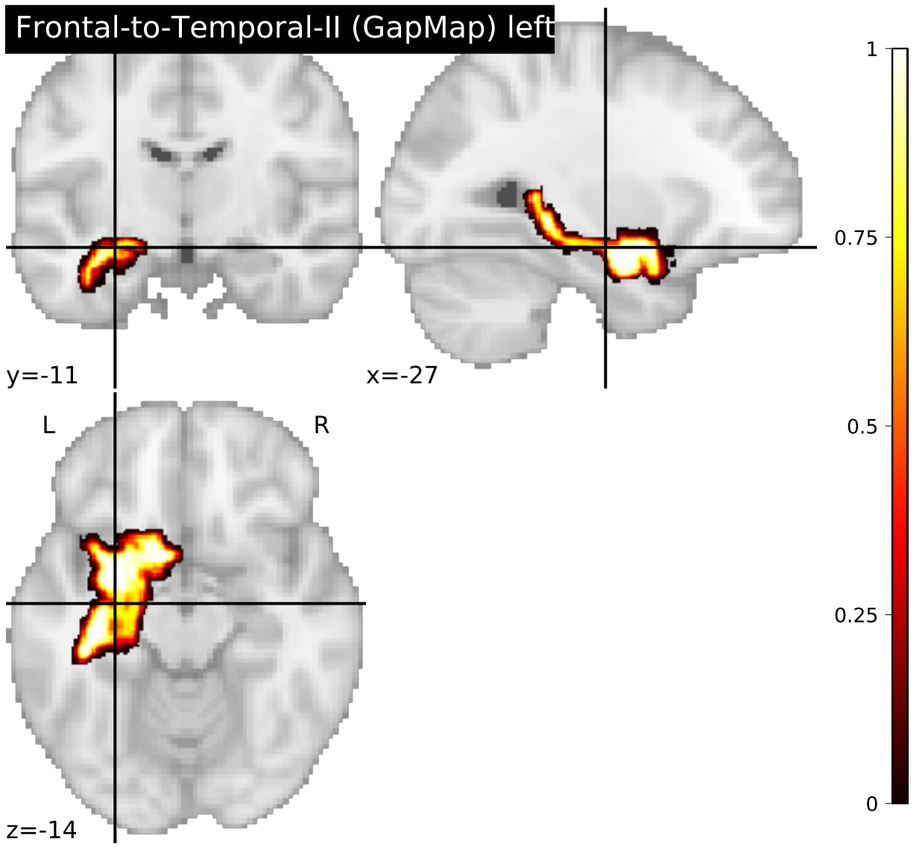
Zaborszky, L., Hoemke, L., Mohlberg, H., Schleicher, A., Amunts, K., & Zilles, K. (2008). Stereotaxic probabilistic maps of the magnocellular cell groups in human basal forebrain. NeuroImage, 42(3), 1127–1141.

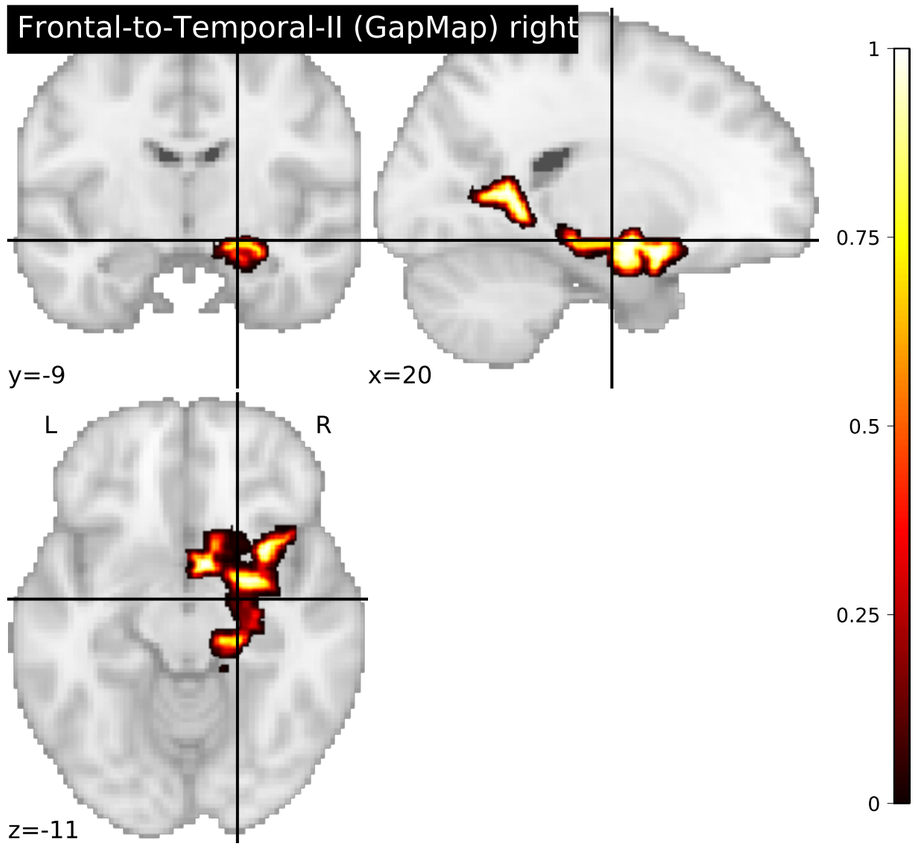




Frontal-to-Temporal-II (GapMap)

Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral cortex
        └── overall
            └── overall



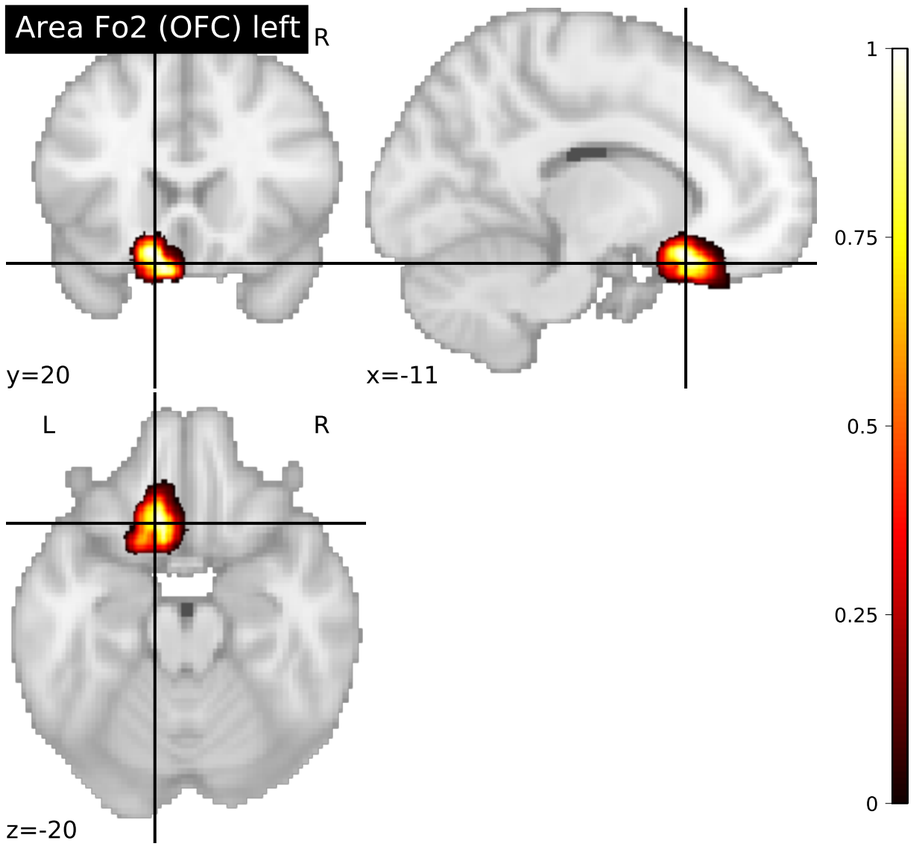


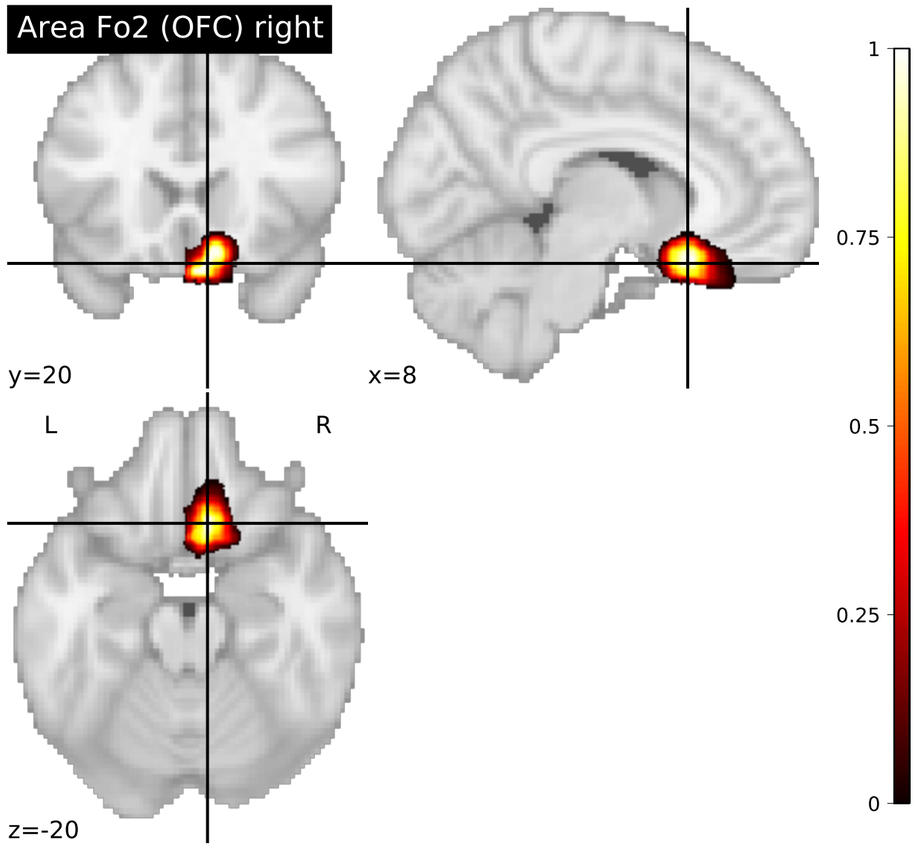
Area Fo2 (OFC)

Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral cortex
        └── frontal lobe
            └── medial orbitofrontal cortex

This dataset contains the distinct architectonic Area Fo2 (OFC) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to Area Fo2 (OFC). The probability map of Area Fo2 (OFC) are provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Area Fo2 (OFC): Henssen et al. (2018) [Data set, v3.2] [DOI: 110.25493/N14D-JQT](https://doi.org/10.25493%2FN14D-JQT) The most probable delineation of Area Fo2 (OFC) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.13] [DOI: 10.25493/Q3ZS-NV6](https://doi.org/10.25493%2FQ3ZS-NV6) Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D)

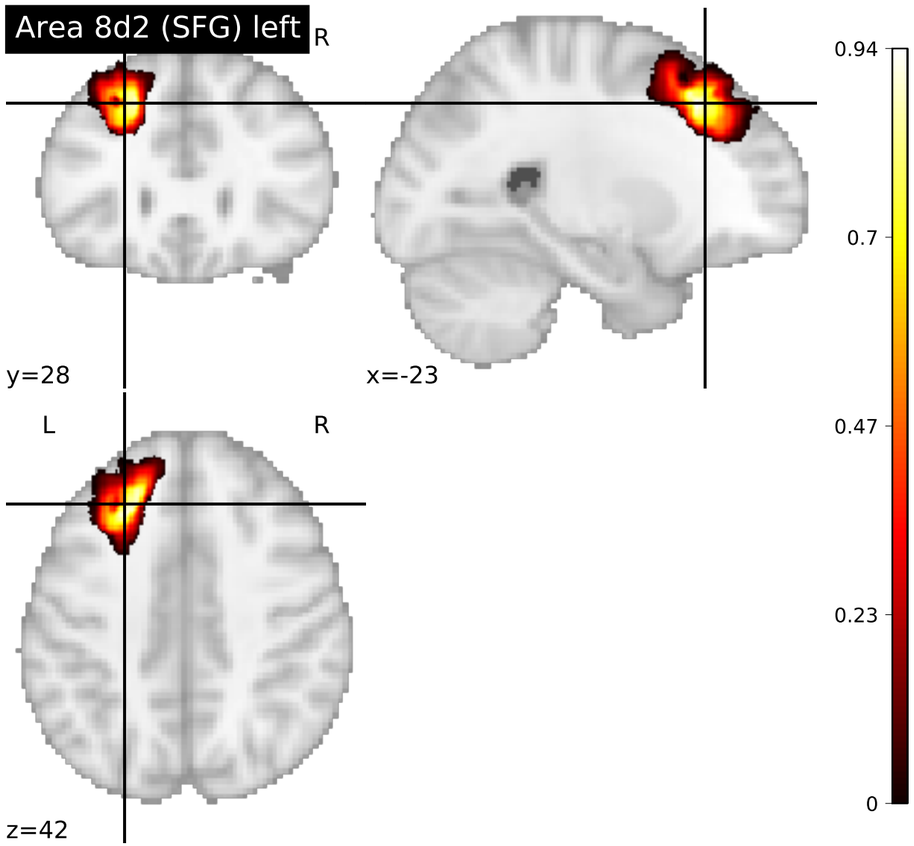
Henssen, A., Zilles, K., Palomero-Gallagher, N., Schleicher, A., Mohlberg, H., Gerboga, F.,… Amunts, K. (2016). Cytoarchitecture and probability maps of the human medial orbitofrontal cortex. Cortex, 75, 87–112.

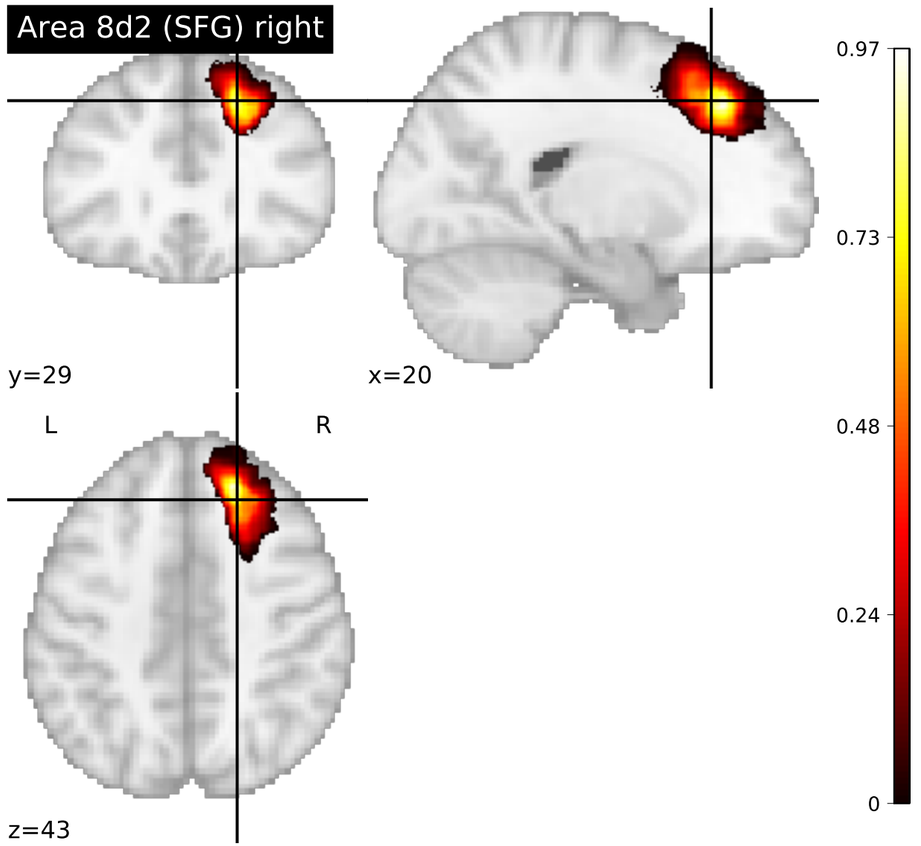




Area 8d2 (SFG)

Julich-Brain Cytoarchitectonic Maps 2.9
- telencephalon
  - cerebral cortex
    - frontal lobe
      - superior frontal gyrus





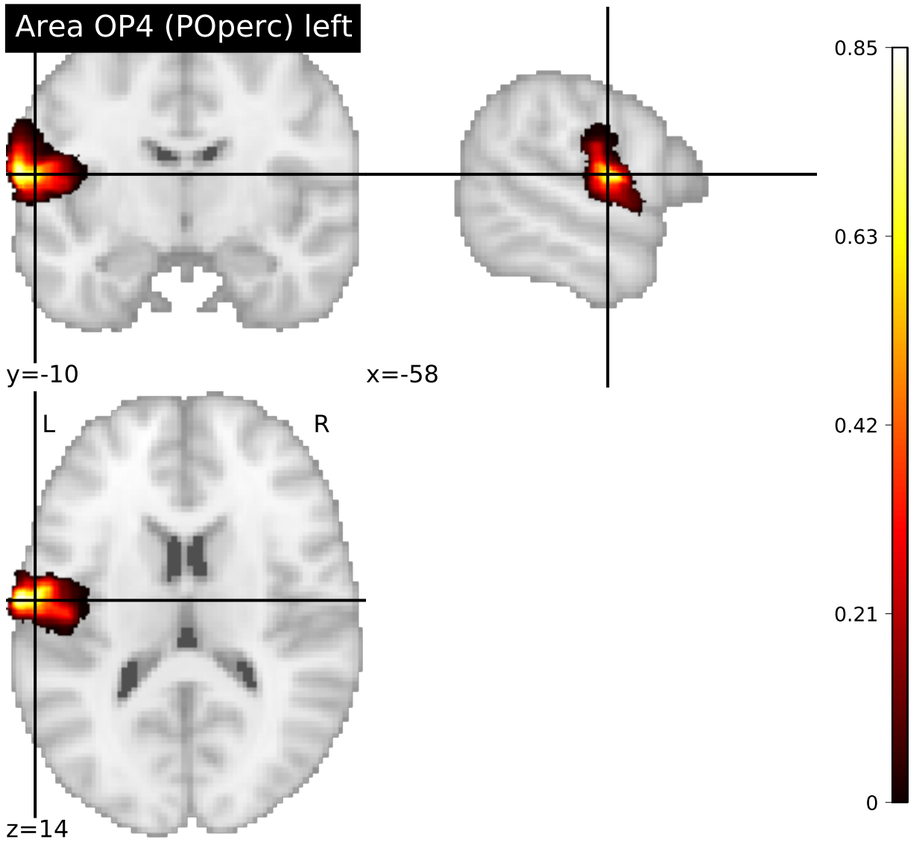
Area OP4 (POperc)

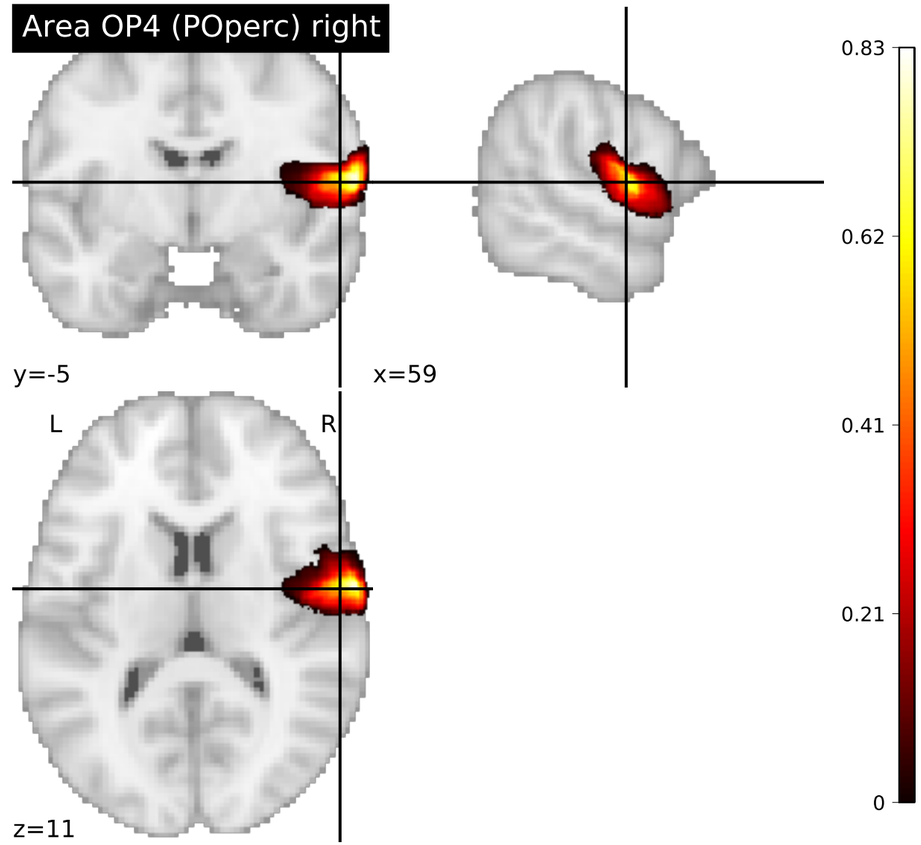
Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral cortex
        └── parietal lobe
            └── parietal operculum

This dataset contains the distinct architectonic Area OP4 (POperc) in the MNI Colin 27 and MNI ICBM 152 reference spaces. As part of the Julich-Brain atlas, the area was identified using classical histological criteria and quantitative cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. Subsequently, the results of the cytoarchitectonic analysis are mapped to the MNI Colin 27 and MNI ICBM 152 reference spaces where each voxel is assigned with the probability to belong to Area OP4 (POperc). The probability map of Area OP4 (POperc) is provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Area OP4 (POperc): Eickhoff et al. (2018) [Data set, v9.2] [DOI: 10.25493/51S0-K7W](https://doi.org/10.25493%2F51S0-K7W) Eickhoff et al. (2019) [Data set, v11.0] [DOI: 10.25493/99GW-N85](https://doi.org/10.25493%2F99GW-N85) The most probable delineation of Area OP4 (POperc) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.13] [DOI: 10.25493/Q3ZS-NV6](https://doi.org/10.25493%2FQ3ZS-NV6) Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493/TAKY-64D)

Eickhoff, S. B., Amunts, K., Mohlberg, H., & Zilles, K. (2005). The Human Parietal Operculum. II. Stereotaxic Maps and Correlation with Functional Imaging Results. Cerebral Cortex, 16(2), 268–279.

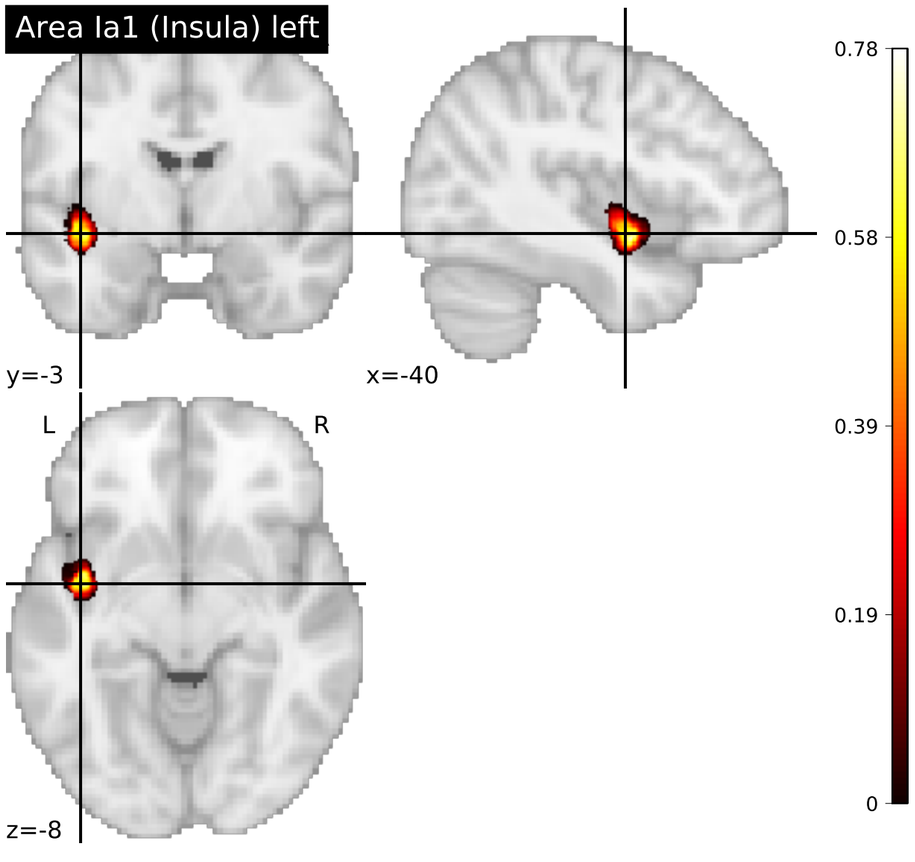
Eickhoff, S. B., Schleicher, A., Zilles, K., & Amunts, K. (2005). The Human Parietal Operculum. I. Cytoarchitectonic Mapping of Subdivisions. Cerebral Cortex, 16(2), 254–267.

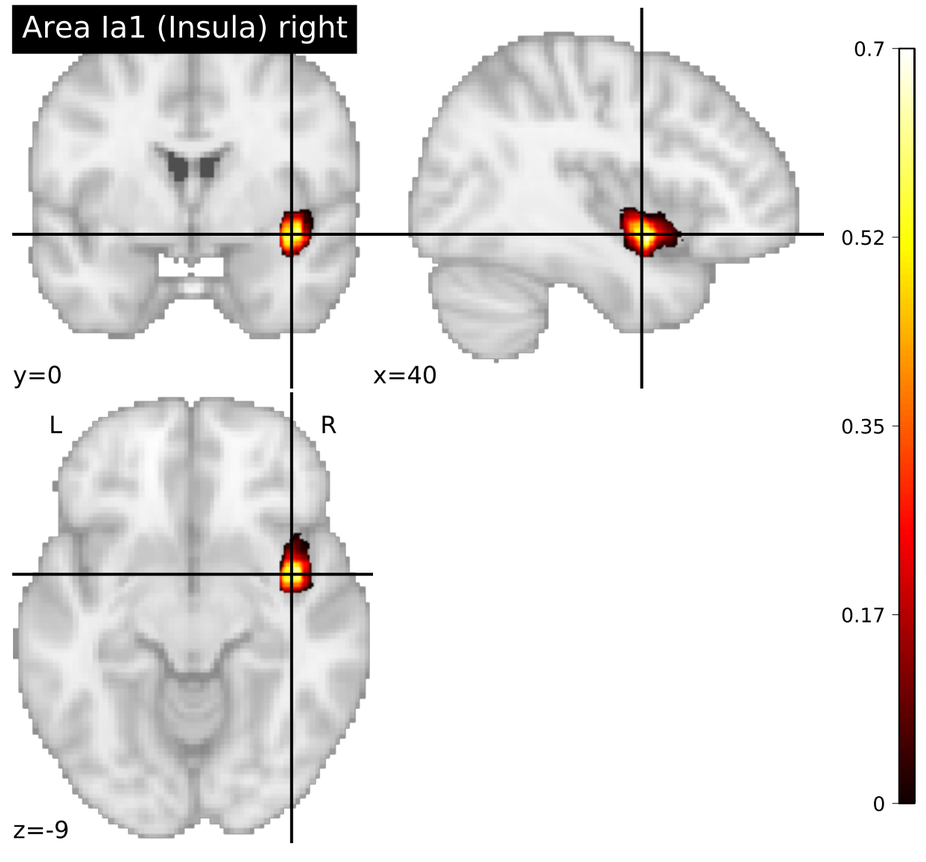




Area Ia1 (Insula)

Julich-Brain Cytoarchitectonic Maps 2.9
- telencephalon
  - cerebral cortex
    - insula
      - agranular insula





Area FG4 (FusG)

Julich-Brain Cytoarchitectonic Maps 2.9
└── telencephalon
    └── cerebral cortex
        └── temporal lobe
            └── fusiform gyrus

This dataset contains the distinct architectonic Area FG4 (FusG) in the individual, single subject template of the MNI Colin 27 as well as the MNI ICBM 152 2009c nonlinear asymmetric reference space. As part of the Julich-Brain cytoarchitectonic atlas, the area was identified using cytoarchitectonic analysis on cell-body-stained histological sections of 10 human postmortem brains obtained from the body donor program of the University of Düsseldorf. The results of the cytoarchitectonic analysis were then mapped to both reference spaces, where each voxel was assigned the probability to belong to Area FG4 (FusG). The probability map of Area FG4 (FusG) are provided in the NifTi format for each brain reference space and hemisphere. The Julich-Brain atlas relies on a modular, flexible and adaptive framework containing workflows to create the probabilistic brain maps for these structures. Note that methodological improvements and integration of new brain structures may lead to small deviations in earlier released datasets. Other available data versions of Area FG4 (FusG): Lorenz et al. (2018) [Data set, v6.0] [DOI: 10.25493/6A73-MZS](https://doi.org/10.25493%2F6A73-MZS) The most probable delineation of Area FG4 (FusG) derived from the calculation of a maximum probability map of all currently released Julich-Brain brain structures can be found here: Amunts et al. (2019) [Data set, v1.13] [DOI: 10.25493/Q3ZS-NV6](https://doi.org/10.25493%2FQ3ZS-NV6) Amunts et al. (2019) [Data set, v1.18] [DOI: 10.25493/8EGG-ZAR](https://doi.org/10.25493%2F8EGG-ZAR) Amunts et al. (2020) [Data set, v2.2] [DOI: 10.25493/TAKY-64D](https://doi.org/10.25493%2FTAKY-64D)

Lorenz, S., Weiner, K. S., Caspers, J., Mohlberg, H., Schleicher, A., Bludau, S., … Amunts, K. (2015). Two New Cytoarchitectonic Areas on the Human Mid-Fusiform Gyrus. Cerebral Cortex, bhv225.