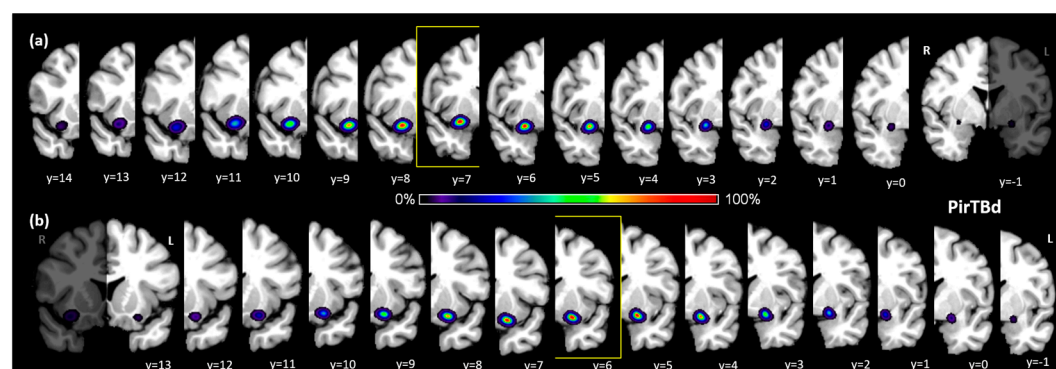
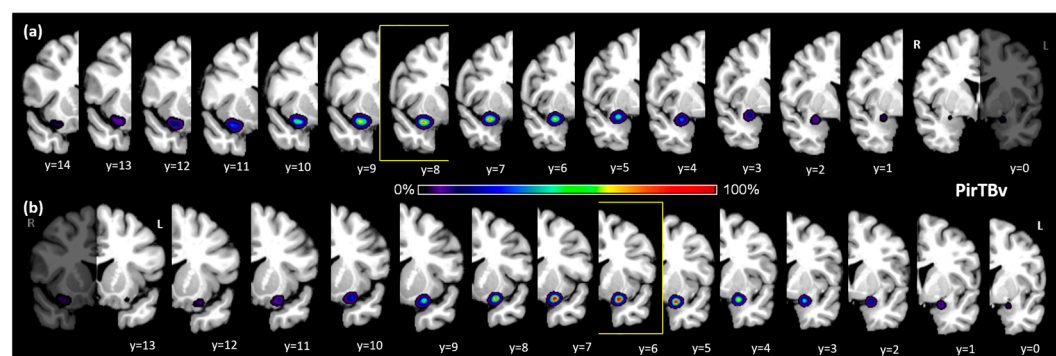


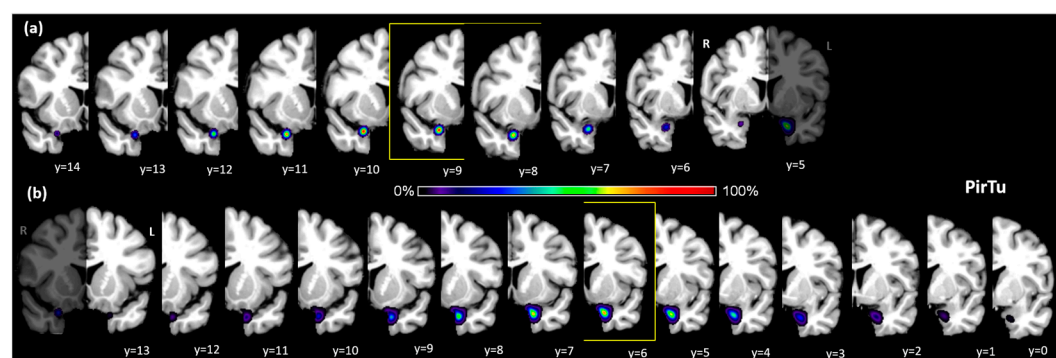
Supplementary Materials:



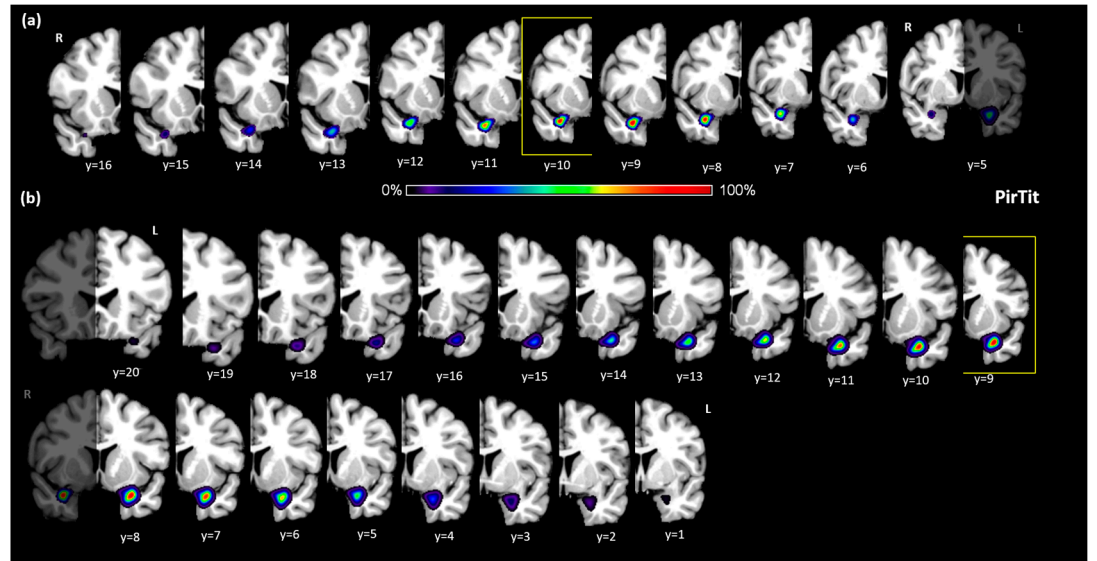
**Figure S1.** Probabilistic map of PirTBd throughout its rostro-caudal extent in the MNI Colin 27 reference space: (a) In the right; (b) In the left hemisphere. Section with the center of mass y-coordinate is framed in the right ( $y=7$ ) and left ( $y=6$ ) hemisphere. Color bar reflects a probability of the area in a particular voxel of the section. L—left hemisphere, R—right hemisphere



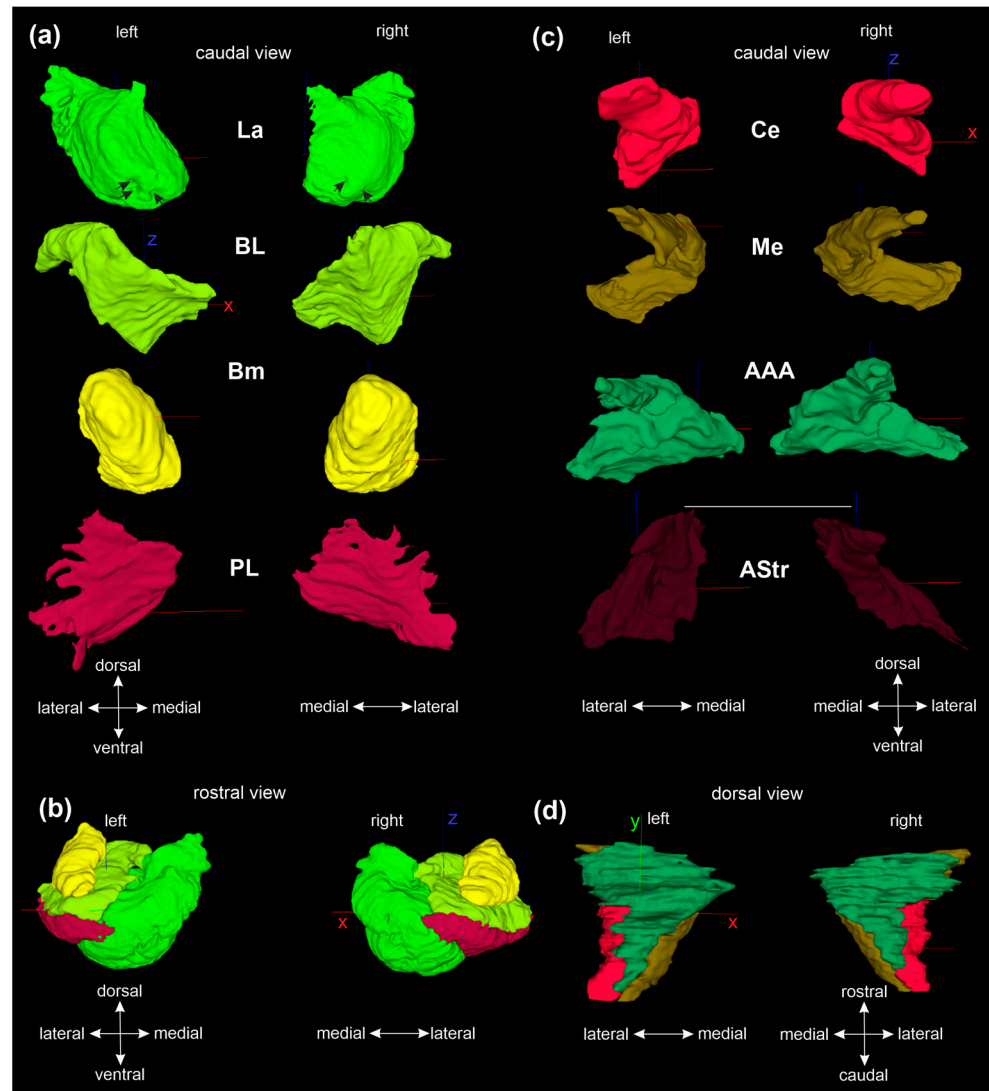
**Figure S2.** Probabilistic map of PirTBv its rostro-caudal extent in of the MNI Colin 27 reference space: (a) In the right; (b) In the left hemisphere. Section with the center of mass y-coordinate is framed in the right ( $y=8$ ) and left ( $y=6$ ) hemisphere. Color bar reflects a probability of the area in a particular voxel of the section. L—left hemisphere, R—right hemisphere.



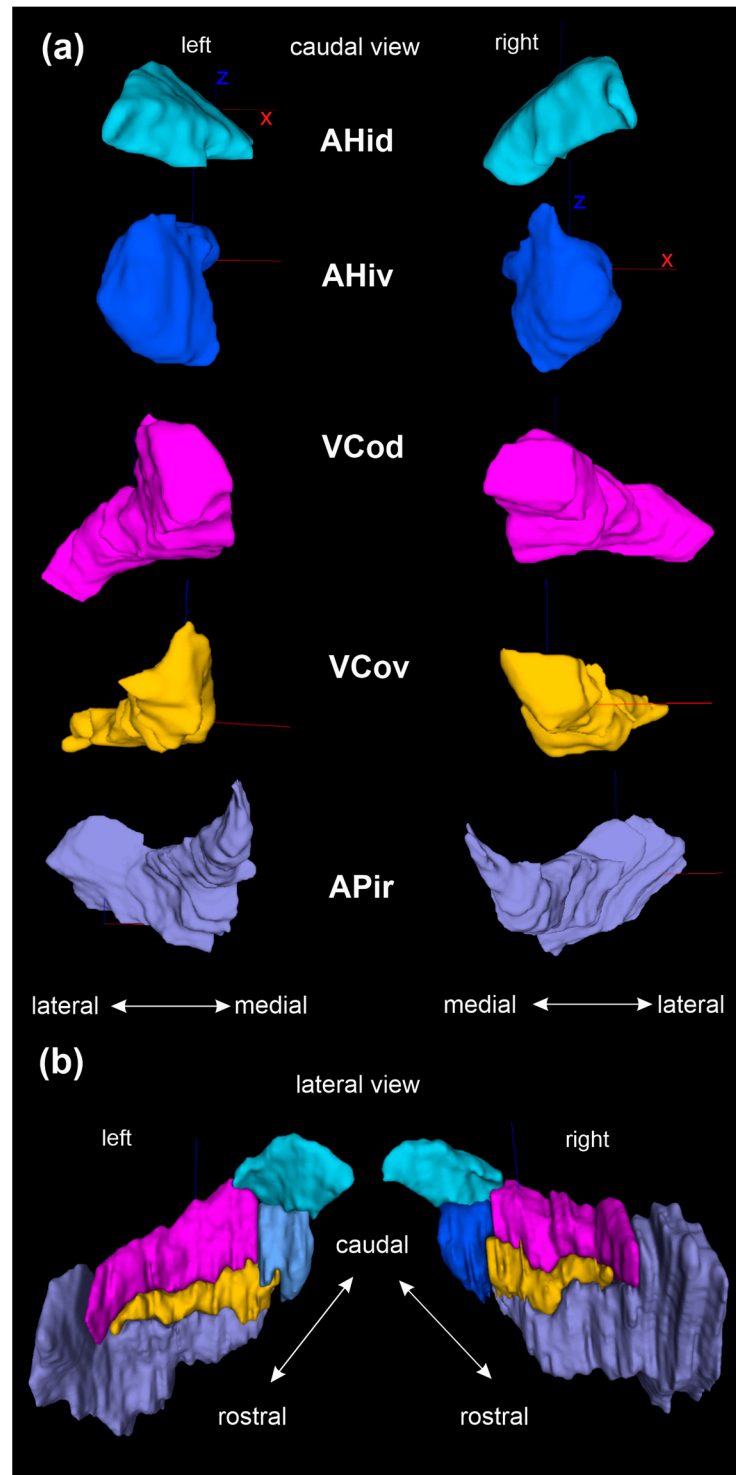
**Figure S3.** Probabilistic map of PirTu throughout its rostro-caudal extent of the MNI Colin 27 reference space: (a) In the right; (b) In the left hemisphere. Section with the center of mass y-coordinate is framed in the right ( $y=9$ ) and left ( $y=6$ ) hemisphere. Color bar reflects a probability of the area in a particular voxel of the section. L—left hemisphere, R—right hemisphere.



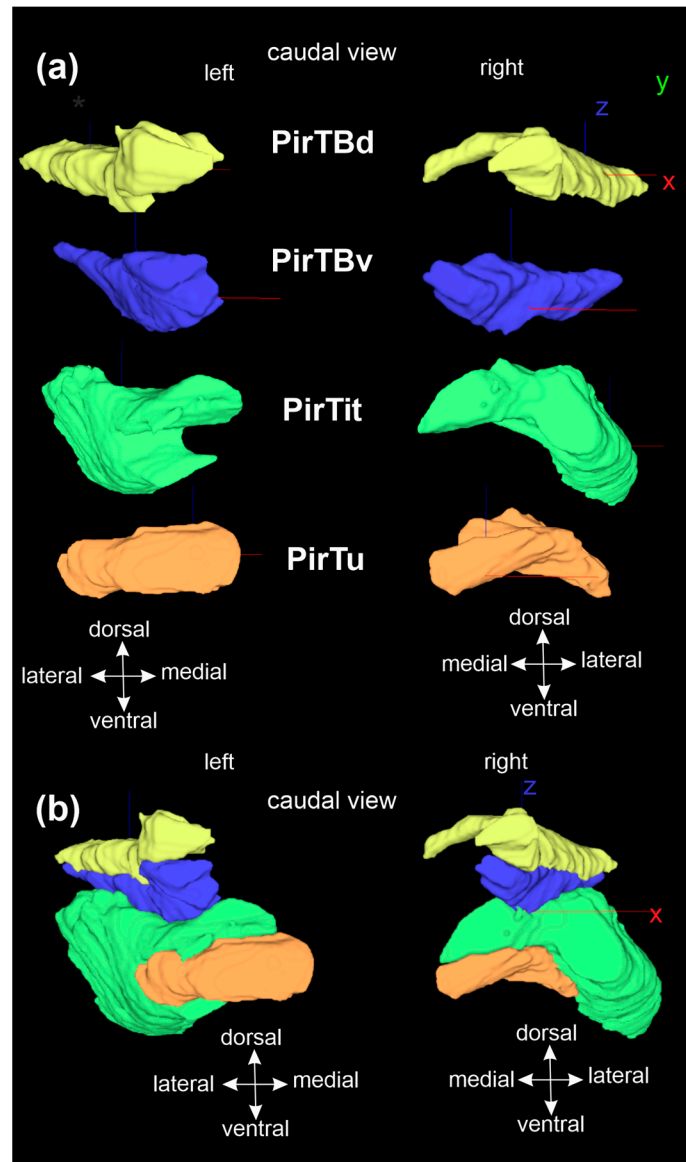
**Figure S4.** Probabilistic map of PirTit throughout its rostro-caudal extent in of the MNI Colin 27 reference space: (a) In the right; (b) In the left hemisphere. Section with the center of mass y-coordinate is framed in the right (y=10) and left (y=9) hemisphere. Color bar reflects a probability of the area in a particular voxel of the section. L—left hemisphere, R—right hemisphere.



**Figure S5.** 3D reconstructions of the amygdala in the BigBrain in both hemispheres: **(a)** Subdivisions of the laterobasal amygdala; **(b)** The entire laterobasal group; **(c)** Subdivisions of the centromedial amygdala and the amygdalostriatal transition zone; **(d)** The entire centromedial group. Subdivisions in the groups have the same colors as in **(a)** and **(c)**. Stereotaxic x (red), y (green) and z coordinates (blue). Arrows in lateral nucleus (La) indicate recesses on the surface, associated with places of contact with the granular part of the paralaminar nucleus. Abbreviations in **(a)** (from top to bottom): La—lateral nucleus, BL—basolateral nucleus, Bm—basomedial nucleus, PL—paralaminar nucleus; Abbreviations in **(c)** (from top to bottom): Ce—central nucleus, Me—medial nucleus, AAA—anterior amygdaloid area; AStr—amygdalostriatal transition zone.



**Figure S6.** 3D reconstructions of the amygdala in the BigBrain in both hemispheres: **(a)** Subdivisions of the superficial amygdala; **(b)** The entire superficial group. Subdivisions within the groups have the respective colors as in (a). Stereotaxic x (red), y (green) and z coordinates (blue). Abbreviations (from top to bottom): AHid — amygdalohippocampal transition area, dorsal part; AHiv — amygdalohippocampal transition area, ventral part; VCod — ventral cortical nucleus, dorsal part; VCov — ventral cortical nucleus, ventral part; APir — amygdalopiriform transition area.



**Figure S7.** 3D reconstructions of the mesial piriform cortex in the BigBrain in both hemispheres: **(a)** Subdivisions, and **(b)** The entire region. Subdivisions within the region have the respective colors as in (a). Stereotaxic x (red), y (green) and z coordinates (blue). Abbreviations in (a): PirTBd—piriform temporobasal area, dorsal part, PirTBv—piriform temporobasal area, ventral part, PirTit—piriform temporal area (Incisura temporalis), PirTu—piriform temporal area (uncus).

**Table S1.** The Initial Eigenvalues and Extraction Sums for first three factors (IF1-IF3) out of 21 at the initial point of analysis.

IF	Initial Eigenvalues			Extraction Sums of Squared IF Loadings			Kruskal-Wallis Test
	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %	P value
1	11.433	54.442	54.442	11.433	54.442	54.442	< 0.001
2	6.351	30.245	84.687	6.351	30.245	84.687	< 0.001
3	1.253	5.966	90.653	1.253	5.966	90.653	< 0.001

\* Extraction Sums of Squared Loadings represent eigenvalues (greater than 1) associated with these factors extracted in the analysis (that results in 3 factors).

**Table S2.** Relation of modified Haralick's features to first three factors derived in PCA

Modified Haralick's features	IF1	IF2	IF3
Homogeneity	0.994		
InverseDifference	0.992		
DifferenceAverage	0.991		
Dissimilarity	0.990		
Correlation	0.975		
InformationMeasureOfCorrelation2	0.974		
DifferenceEntropy	0.970		
DifferenceVariance	0.963		
Contrast	0.959		
MaximalCorrelationCoefficient	0.954		
Entropy	0.872		0.321
InformationMeasureOfCorrelation1	0.737		0.402
sumVariance		0.986	
clusterProminence		0.967	
autoCorrelation		0.959	
sumOfSquaresVariance		0.953	
clusterShade		0.945	
sumAverage		0.933	
sumEntropy		0.816	
Energy	0.509		0.705
MaximumProbability	0.523		0.564

\* The features are arranged in the order to present the highest values for the IF1 and IF2– most important contributors to the factors – in the upper rows. The table present only values which are higher than 0.3.

**Probabilistic maps (datasets):**

<https://www.ebrains.eu/tools/human-brain-atlas>

**In addition, data for each structure can be found at:**

**Piriform region**

Probabilistic cytoarchitectonic map of the area piriformis temporalis. (JBA - PM Area PirT)

<https://search.kg.ebrains.eu/live/a04a3178-c247-4a55-bb4c-eb985e1c1e8a>

Probabilistic cytoarchitectonic map of the area piriformis temporalis, incisura temporalis. (JBA - PM Area PirT.Tit)

<https://search.kg.ebrains.eu/live/088a8f2d-1a54-403d-abd3-d805a9d797f2>

Probabilistic cytoarchitectonic map of the area piriformis temporalis, uncus. (JBA - PM Area PirT.Tu)

<https://search.kg.ebrains.eu/live/f425afb1-5eb5-4f07-8782-dac156efc377>

Probabilistic cytoarchitectonic map of the area piriformis temporobasalis. (JBA - PM Area PirTB)

<https://search.kg.ebrains.eu/live/dd2858a9-6565-4a27-b8fa-34776cb51a12>

Probabilistic cytoarchitectonic map of the area piriformis temporobasalis dorsalis. (JBA - PM Area PirTB.TBd)

<https://search.kg.ebrains.eu/live/fb438a0a-6086-4507-97c6-fbc23e4afba0>

Probabilistic cytoarchitectonic map of the area piriformis temporobasalis ventralis. (JBA - PM Area PirTB.TBv)

<https://search.kg.ebrains.eu/live/bf11f1b2-4acc-4b87-95e9-496e40f9bbe4>

## Amygdala

Probabilistic cytoarchitectonic map of the amygdalostriatal transition zone. (JBA - PM Astr)

<https://search.kg.ebrains.eu/live/4ee5aee4-0513-4b07-937b-6331e80406dc>

Probabilistic map of the anterior amygdaloid area of the centromedial amygdala (CM.AAA) (v8.2):

<https://search.kg.ebrains.eu/instances/12486b41-bab0-466f-af94-5d3783bd4f40>

Probabilistic map of the central nucleus of the centromedial amygdala (CM.Ce) (v8.2): <https://search.kg.ebrains.eu/instances/f2e7363d-569c-4e67-87b1-5096482eb5f5>

Probabilistic map of the medial nucleus of the centromedial amygdala (CM.Me) (v8.2): <https://search.kg.ebrains.eu/instances/13aab904-dfe7-4ee8-bdef-5db052c388f7>

Probabilistic map of the amygdalohippocampal transition area of the superficial amygdaloid group (SF.AHi) (v8.2):

<https://search.kg.ebrains.eu/instances/b462bbf2-565b-4690-a03a-81bc4941da65>

Probabilistic map of the amygdalopiriform transition area of the superficial amygdaloid group (SF.APir) (v8.2):

<https://search.kg.ebrains.eu/instances/bcd9e8cb-9e63-49a2-b898-299fa01a5928>

Probabilistic map of the ventral cortical nucleus of the superficial amygdaloid group (SF.VCo) (v8.2):

<https://search.kg.ebrains.eu/instances/0fa40afa-414e-43c7-8886-b0f9f5e943e0>

Probabilistic map of the basolateral nucleus of the laterobasal group (LB.BI) (v8.2): <https://search.kg.ebrains.eu/instances/3cc375a3-be11-4358-bd9a-d35a8c00b80a>



Probabilistic map of the basomedial nucleus of the laterobasal group (LB.Bm) (v8.2): <https://search.kg.ebrains.eu/instances/d164fe58-6bee-45ca-886a-40640c4ba576>

Probabilistic map of the lateral nucleus of the laterobasal group (LB.La) (v8.2): <https://search.kg.ebrains.eu/instances/203b7c29-29ab-40d0-bc52-0bd2c4eb1c4c>

Probabilistic map of the paralaminar nucleus of the laterobasal group (LB.Pl) (v8.2): <https://search.kg.ebrains.eu/instances/e7b906ec-7eb0-4c16-b669-83f2d13a71c1>

Probabilistic map of the intermediate central fiber masses of the internal intermediate fiber masses of the amygdala (IF.ice) (v8.2): <https://search.kg.ebrains.eu/instances/e7b4da43-1e2d-43c0-ad62-e25b6aff6bff>

Probabilistic map of the intermediate orolateral fiber masses of the internal intermediate fiber masses of the amygdala (IF.iol) (v8.2): <https://search.kg.ebrains.eu/instances/6cb21576-2ebf-4ba6-b715-a1a1abed289e>

Probabilistic map of the Lamella dorsalis of the internal intermediate fiber masses of the amygdala (IF.ld) (v8.2): <https://search.kg.ebrains.eu/instances/145fd4de-84bb-4b98-a43c-6f6f6a6ef5b4>

Probabilistic map of the intermediate caudomedial fiber masses of the internal medial fiber masses of the amygdala (MF.icm) (v8.2): <https://search.kg.ebrains.eu/instances/c50453fa-3e85-471d-a128-9143a31855dc>

Probabilistic map of the Lamella medialis of the internal medial fiber masses of the amygdala (MF.lm) (v8.2): <https://search.kg.ebrains.eu/instances/af25c1b0-94d1-4ff2-9ab9-1a735038171c>

#### **BigBrain Datasets (mesial piriform region):**

Reference delineations of allocortical PirTBd of the mesial piriform region in the BigBrain: <https://search.kg.ebrains.eu/instances/c3e2b016-dfa2-48f4-b89a-33e0d9cb22a3>

Reference delineations of allocortical PirTBv of the mesial piriform region in the BigBrain: <https://search.kg.ebrains.eu/instances/630a7e78-8879-4207-8409-a2a75ffd95f8>

Reference delineations of periallocortical PirTit of the mesial piriform region in the BigBrain: <https://search.kg.ebrains.eu/instances/95fb3fee-b4b6-4eda-97db-76c2c07fac0c>

Reference delineations of periallocortical PirTu of the mesial piriform region in the BigBrain: <https://search.kg.ebrains.eu/instances/60bd6360-f787-4cb6-abcf-cfb823c85767>

3D cytoarchitectonic map of the human mesial piriform region of the BigBrain (v2.0): <https://search.kg.ebrains.eu/instances/788e0f87-22d2-44e5-b096-9e767a0c9c60>

#### **BigBrain Datasets (amygdala):**



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Reference delineations of the amygdalostriatal transition zone in individual sections of the BigBrain (v1):

<https://search.kg.ebrains.eu/instances/24ff7ea7-064c-490c-8dfb-31da6c7a68ab>

Reference delineations of the centromedial amygdaloid group in individual sections of the BigBrain (v1):

<https://search.kg.ebrains.eu/instances/7953505c-095f-43fa-a1b1-53fd65f4bfbf>

Reference delineations of the laterobasal amygdaloid group in individual sections of the BigBrain (v1):

<https://search.kg.ebrains.eu/instances/c04fa2a3-fb1e-486a-9069-92081b85b210>

Reference delineations of the superficial amygdaloid group in individual sections of the BigBrain (v1):

<https://search.kg.ebrains.eu/instances/5a4e5a04-5d10-4f88-ac01-30409e3d67e0>

Reference delineations of the internal medial fiber masses of the amygdala in individual sections of the BigBrain (v1):

<https://search.kg.ebrains.eu/instances/d2292a19-6af1-4d99-b5a8-0319a10d23b9>

Reference delineations of the internal intermediate fiber masses of the amygdala in individual sections of the BigBrain

(v1): <https://search.kg.ebrains.eu/instances/70b450e1-a96b-4a00-8442-e3628970d73b>

Reference delineations of the ventromedial tract of the Stria terminalis in the individual sections of the BigBrain (v1):

<https://search.kg.ebrains.eu/instances/a61a3323-1188-46c3-91cc-6bb197df3067>

Ultrahigh resolution 3D cytoarchitectonic map of the human amygdala created by a Deep-Learning assisted workflow (v2.0): <https://search.kg.ebrains.eu/instances/cb40a501-b155-4c2f-8df3-0ee7c5f1ed00>