# DBS Tractography Atlas V1

## Structures

| Former filename[1] | Complete anatomical name | New filename[2] | Source/ Defined by | Based on | ROI |
|---|---|---|---|---|---|
| Ca | Caudate | Cd | CIT168 (1) | i.a. HCP S500 subject release (2) | see [1] |
| EXA | Extended amygdala | EA | CIT168 (1) | i.a. HCP S500 subject release (2) | see [1] |
| HN | Habenula | Hb | CIT168 (1) | i.a. HCP S500 subject release (2) | see [1] |
| HTH | Hypothalamus | Hy | CIT168 (1) | i.a. HCP S500 subject release (2) | see [1] |
| MN | Mammillary body | MB | CIT168 (1) | i.a. HCP S500 subject release (2) | see [1] |
| NAC | Nucleus accumbens | Ac | CIT168 (1) | i.a. HCP S500 subject release (2) | see [1] |
| PBP | Parabrachial pigmented Nucleus | PBP | CIT168 (1) | i.a. HCP S500 subject release (2) | see [1] |
| Pu | Putamen | Pu | CIT168 (1) | i.a. HCP S500 subject release (2) | see [1] |
| SNc | Substantia nigra, pars compacta | SNc | CIT168 (1) | i.a. HCP S500 subject release (2) | see [1] |
| SNr | Substantia nigra, pars reticulata | SNr | CIT168 (1) | i.a. HCP S500 subject release (2) | see [1] |
| VeP | Ventral pallidum | VP | CIT168 (1) | i.a. HCP S500 subject release (2) | see [1] |
| VTA | Ventral tegmental area | VTA | CIT168 (1) | i.a. HCP S500 subject release (2) | see [1] |
| GPe | External pallidum | GPe | DISTAL (3) | ICBM 152 2009b (nonlinear; 4) | see [3] |
| GPi | Internal pallidum | GPi | DISTAL (3) | ICBM 152 2009b (nonlinear; 4) | see [3] |
| RN | Red nucleus | RN | DISTAL (3) | ICBM 152 2009b (nonlinear; 4) | see [3] |
| STN | Subthalamic nucleus | STN | DISTAL (3) | ICBM 152 2009b (nonlinear; 4) | see [3] |
| STN_associative | | STN_associative | DISTAL (3) | Structural connectivity, Parcellation according to Oxford Thalamic Connectivity Atlas (5) | see [3] |
| STN_limbic | | STN_limbic | DISTAL (3) | Structural connectivity, Parcellation according to Oxford Thalamic Connectivity Atlas (5) | see [3] |
| STN_motor | | STN_motor | DISTAL (3) | Structural connectivity, Parcellation according to Oxford Thalamic Connectivity Atlas (5) | see [3] |

## Tracts

| Former filename | Complete anatomical name | New filename | Source/ Defined by | Based on | ROI |
|---|---|---|---|---|---|
| Ansa_Lenticularis | Ansa lenticularis | al | 6 | HCP 1021 | GPi-VOa |
| Ansa_Subthalamica | Ansa subthalamica | as | 6 | HCP 1021 | STN-GPi |
| ATR | Anterior thalamic radiation | atr | 6 | HCP 1021 | Th-PC |

[1] until 07/2023
[2] from 07/2023

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|---|---|---|---|---|---|
| DRTT | Dentatorubrothalamic Tract | drtt | [6] | HCP 1021 | DN, RN, VIM/VOp, M1 |
| NDRTT | Non-decussating dentatorubrothalamic Tract | ndrtt | [6] | HCP 1021 | DN, RN, VIM/VOp, M1 |
| Fasciculus_Lenticularis | Fasciulus lenticularis | lenf | [6] | HCP 1021 | GPi-VOa |
| Fasciculus_Subthalamicus | Fasciculus subthalamicus | subtf | [6] | HCP 1021 | STN-GPe |
| MFB | Medial forebrain bundle | mfb | [6] | HCP 1021 | VTA-Ac-OC |
| STN_associative_tract | Subthalamic nucleus (associative cortical input) | STN_associative_tract | [6] | HCP 1021 | STN-broad associative regions |
| STN_limbic_tract | Subthalamic nucleus (limbic cortical input) | STN_limbic_tract | [6] | HCP 1021 | STN-broad limbic regions |
| STN_motor_tract | Subthalamic nucleus (motor cortical input) | STN_motor_tract | [6] | HCP 1021 | STN-MC |
| vtaPP_slMFB | VTA projection pathway (formerly slMFB: supero-lateral branch of the medial forebrain bundle) | VTApp | [6] | HCP 1021 | DN-VTA-SFG-MFG-lateral OFV |

*Abbreviations*: Ac = Nucleus accumbens, DN = dentate nucleus, GPe = Globus pallidus externus, GPi = Globus pallidus internus, MC = motor cortex, M1 = Primary motor cortex, MFG = Middle frontal gyrus, OC = olfactory cortex, OFV = Orbitofrontal cortex, PC = prefrontal cortex, RN = red nucleus, SFG = Superior frontal gyrus, STN = subthalamic nucleus, Th = Thalamus, VIM = ventral intermedius nucleus, VOa = ventralis oralis anterior, VOp = ventralis oralis posterior, VTA = ventral tegmental area.

## Bibliography


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