

Table S1: Parameters for deformable reconstruction of brain volume based on Nissl-stained sections.

Number of iterations	Image type	Slice range	Registration parameters
(-)	images	34 selected (*)	CC(16, 0.5), Gauss(3,1)
5	masks	whole stack	MSQ(-, 0.05), Gauss(1,1)
5	images	whole stack	CC(4, 0.05), Gauss(1,1)
6	images	whole stack	CC(4, 0.01), Gauss(1,1)
2	images	1-80 (**)	CC(4, 0.01), Gauss(1,1)

(-) the initial step is not considered as an iteration; (\*) Compensation of highly deformed slices was performed on a manually selected set of slices (see text for explanation); (\*\*) Two more iterations were carried out for slices constituting olfactory bulb to improve the shape of this fragment of the brain.

Table S2: Parameters for deformable reconstruction of brain volume based on myelin-stained slices.

Number of iterations	Image type	slice range	registration parameters
(-)	images	17 selected (*)	CC(16, 0.5), Gauss(3,1); CC(4, 0.25), Gauss(3,1) (**)
8	masks	whole stack	MSQ(-, 0.05), Gauss(1,1)
5	images	whole stack	CC(2, 0.01), Gauss(1,1)
4	images	1-80 (***)	CC(2, 0.01), Gauss(1,1)

(-) the initial step is not considered as an iteration; (\*) Compensation of highly deformed slices was performed on a manually selected set of slices (see text for explanation); (\*\*) All sets of different parameters used in this stage are presented as different slices were corrected using different parameters; (\*\*\*) Two more iterations were carried out for slices constituting olfactory bulb to improve the shape of this fragment of the brain.