Supplementary Table 1 Current sample detailed information

Species	collection	code	sex	age	body mass (kg)	plane of section	section thickness (μm)
HOMINOIDEA							
Homo sapiens	Zilles	14686	M	37	NA	coronal	20
Homo sapiens	Zilles	1696	M	54	NA	coronal	20
Homo sapiens	Zilles	18992	M	56	NA	coronal	20
Homo sapiens	Zilles	20784	M	75	NA	coronal	20
Homo sapiens	Zilles	28193	M	69	NA	coronal	20
Homo sapiens	Zilles	295	F	85	NA	coronal	20
Homo sapiens	Zilles	SN382/81	F	59	61.4	coronal	20
Homo sapiens	Zilles	54491	F	79	NA	coronal	20
Homo sapiens	Zilles	5694	F	72	NA	coronal	20
Homo sapiens	Zilles	6895	F	79	NA	coronal	20
Pan troglodytes‡‡	Zilles	1548	NA	NA	NA	coronal	20
Pan troglodytes	Zilles	4/97	F	24	80.00	coronal	20
Pan troglodytes	Zilles	Schimp 1	F	22	50.00	coronal	20
Pan troglodytes	Zilles	YN89-278	M	22	53.00	horizontal	20
Pan troglodytes‡‡	Yakovlev-Haleen	3.1.1.0.1	F	NA	6.80	sagittal	35
Pan troglodytes‡‡	Yakovlev-Haleen	3.1.1.0.3	M	6 or 7	20.41	sagittal	35
Pan paniscus	Zilles	YN86-137	F	2	10.40	coronal	20
Pan paniscus††	Zilles	1/97	F	11	NA	coronal	20
Pan paniscus	GWU	MCZ-2007-52	F	25	NA	coronal	40
Gorilla gorilla	Zilles	YN82-140	F	20	84.70	coronal	20
Gorilla gorilla††	Stephan	A375	M	JUV	22.00	coronal	20
Pongo pygmaeus	Zilles	2/97	M	37	114.00	coronal	20
Pongo pygmaeus	Zilles	YN85-38	M	17	58.00	coronal	20
Pongo pygmaeus	Zilles	5/97	M	34	140.00	coronal	20
Pongo pygmaeus	Zilles	0459	F	A	NA	coronal	
Pongo pygmaeus	GWU	100344	M	39	NA	coronal	40
Hylobates lar	Zilles	YN81-146	F	A	4.00	coronal	20
Hylobates lar	Zilles	3/97	F	22	6.80	coronal	20
Hylobates muelleri	GWU	970431	M	18.6	9.16257	coronal	40
Symphalangus syndacty	GWU	880804	M	33	7.26	coronal	40
CERCOPITHECOIDEA							
CERCOPITHECINAE							
Cercopithecus ascanius	Stephan	219	F	A	3.3	coronal	20
Cercopithecus mitis	GWU	201202	M	A	NA	coronal	40
Cercopithecus mitis	Stephan	261	M	A	7.00	coronal	20
Erythrocebus patas	Stephan	1340	F	A	5.80	coronal	20

Lophocebus albigena	Stephan	242	M	A	9.25	coronal	20
Macaca fascicularis	Zilles	ma22	M	3	2.90	coronal	20
Macaca mulatta§§	Stephan	476	NA	NA	NA	coronal	20
Macaca mulatta§§	Zilles	mm4	NA	A	2.90	horizontal	20
Miopithecus talapoin	Stephan	1171	M	A	1.38	coronal	20
Papio anubis	Stephan	251	M	A	35.00	coronal	20
Papio anubis	Stephan	97	F	A	21.00	coronal	20
COLOBINAE							
Nasalis larvatus	Stephan	1365	F	A	NA	coronal	20
Pygathrix nemaeus	Stephan	1364	F	A	4.00	coronal	20
*Procolobus badius***	Stephan	213	F	A	7.50	coronal	20
*Procolobus badius***	Stephan	216	F	A	8.25	coronal	20
Colobus angolensis	GWU	M00652	M	18	NA	coronal	40

*Nissl stain (Ag, cresyl violet, or thionin) was preferred. Myelin and MR sections were only used in ca

†All measurements (brain, V1, and LGN) were taken on myelin-stained sections only.

‡Myelin sections were used to assist where Nissl (cresyl violet or thionin stain) stain was inadequate or

§LGN was measured solely on high strength (7T) magnetic resonance scans taken on the brain before p
on cresyl violet stained sections, with MR sections used to correct for missing sections.

**the LGN vol. is the published average for 213 and 216, duplicated for each specimen, as the individu

††Juveniles omitted from analyses

‡‡Missing brain weights - ommitted from analyses

§§Combined complimentary data from both *M. mulatta* specimens in analyses

stain*	brain mass (g)	corrected brain volume (cm3)	LGN vol. (cm3)	LGN volume source	number of parvocellular layers and leaflets	subleafleting/ subsidiary
Ag	1437.00	1387.07	0.377	de Sousa et al. 201	4 leaflets	
Ag	1757.00	1695.95	0.538	de Sousa et al. 201	4 leaflets	
Ag	1270.00	1225.87	0.340	de Sousa et al. 201	4 leaflets	
Ag	1349.00	1302.12	0.340	de Sousa et al. 201	4 leaflets	Y
Ag	1360.00	1312.74	0.336	de Sousa et al. 201	4 leaflets	
Ag	1046.00	1009.65	0.209	de Sousa et al. 201	4 leaflets	
Ag	1142.00	1102.32	0.272	de Sousa et al. 201	4 leaflets	
Ag	1350.00	1303.09	0.371	de Sousa et al. 201	4 leaflets	
Ag	1216.00	1173.75	0.254	de Sousa et al. 201	4 leaflets	
Ag	1110.00	1071.43	0.313	de Sousa et al. 201	4 leaflets	
Ag	NA	264.99	0.172	de Sousa et al. 201	4 leaflets	
Ag	359.50	347.01	0.336	de Sousa et al. 201	4 leaflets	
Ag	440.00	424.71	0.349	de Sousa et al. 201	4 leaflets	
Ag	420.00	405.41	0.345	de Sousa et al. 201	4 leaflets	
myelin†	NA	261.11	0.142	de Sousa et al. 201	4 leaflets	
Nissl‡	NA	276.81	0.160	de Sousa et al. 201	4 leaflets	
Ag	392.00	378.38	0.306	de Sousa et al. 201	4 leaflets	
Ag	324.00	312.74	0.261	de Sousa et al. 201	4 leaflets	Y
cresyl violet§	337.00	325.29	0.259	de Sousa et al. 201	4 leaflets	
Ag	376.00	362.93	0.300	de Sousa et al. 201	4 leaflets	
cresyl violet	450.00	434.36	0.317	de Sousa et al. 201	4 leaflets	
Ag	440.00	424.71	0.274	de Sousa et al. 201	2 undivided layers	
Ag	369.00	356.18	0.184	de Sousa et al. 201	2 undivided layers	
Ag	345.00	333.01	0.319	de Sousa et al. 201	2 undivided layers	
cresyl violet	190.00	183.40	NA	NA	2 undivided layers	
cresyl violet	397.80	383.98	NA	NA	2 undivided layers	
Ag	92.00	88.80	0.153	de Sousa et al. 201	2 undivided layers	
Ag	120.00	115.83	0.179	de Sousa et al. 201	2 undivided layers	
cresyl violet	101.80	98.26	0.162	this study	2 undivided layers	
cresyl violet	138.70	133.88	NA	NA	2 undivided layers	
cresyl violet	61.50	59.36	0.147	Stephan et al. 198	4 leaflets	
cresyl violet	71.60	69.11	0.184	this study	4 leaflets	
cresyl violet	75.00	72.39	0.150	Stephan et al. 198	4 leaflets	Y
cresyl violet	94.20	90.93	0.267	this study	4 leaflets	Y

cresyl violet	110.50	106.66	0.182	Stephan et al. 198⁴	4 leaflets	
Ag	57.60	55.60	0.092	de Sousa et al. 201	4 leaflets	
cresyl violet	78.00	75.29	0.158	Stephan et al. 198⁴	NA	
Ag	NA	55.60	NA	this study	4 leaflets	Y
cresyl violet	41.10	39.67	0.109	Stephan et al. 198⁴	4 leaflets	
cresyl violet	222.00	214.29	0.395	Stephan et al. 198⁴	4 leaflets	
cresyl violet	191.00	184.36	NA	NA	NA	
cresyl violet	64.25	62.02	0.157	this study	4 leaflets	
cresyl violet	69.00	66.60	0.115	this study	2 undivided layers	
cresyl violet	78.70	75.97	0.128	Stephan et al. 198⁴	2 undivided layers	
cresyl violet	75.00	72.39	0.128	Stephan et al. 198⁴	2 undivided layers	
cresyl violet	74.4	71.81	0.103	this study	4 leaflets	

ıses of poor Nissl stain, as noted.

· missing.
ıocessing. V1 was measured

.al volumes are no longer available.

Supplementary Table 2. Regression of LGN volume as a function of brain volume.

Regression	slope	R2	Lower 95% Cl	Upper 95% Cl	*p*	intercept	n
species mean LS	0.406	####	0.267	0.545	0.000	-1.590	19
independent contrasts LS	0.489	####	0.241	0.738	0.000	-1.785	18
species mean RMA	0.489	####	0.369	0.647	0.000	-1.765	19