

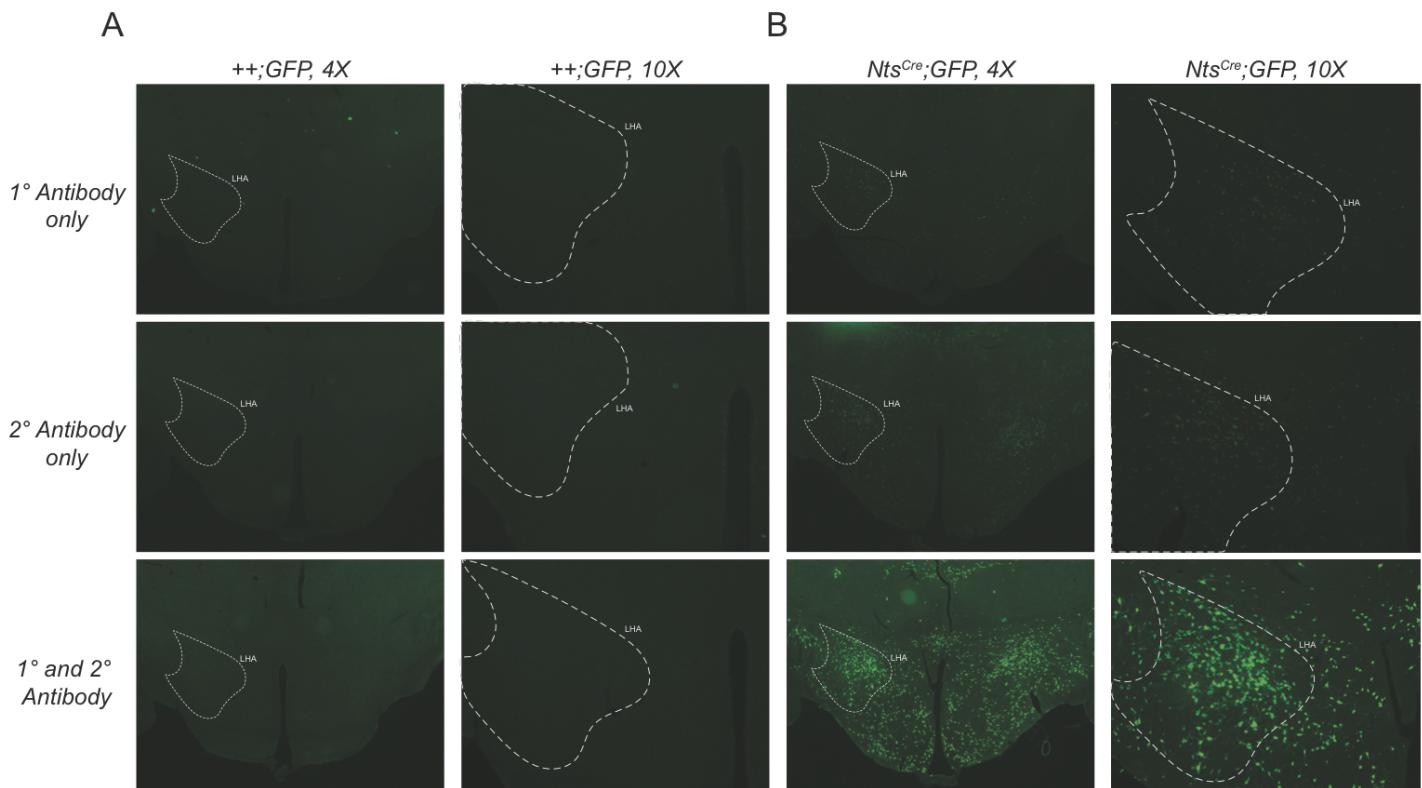
Supplementary Information –

Mapping the Populations of Neurotensin Neurons in the Male Mouse Brain

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Supplementary Figure 1

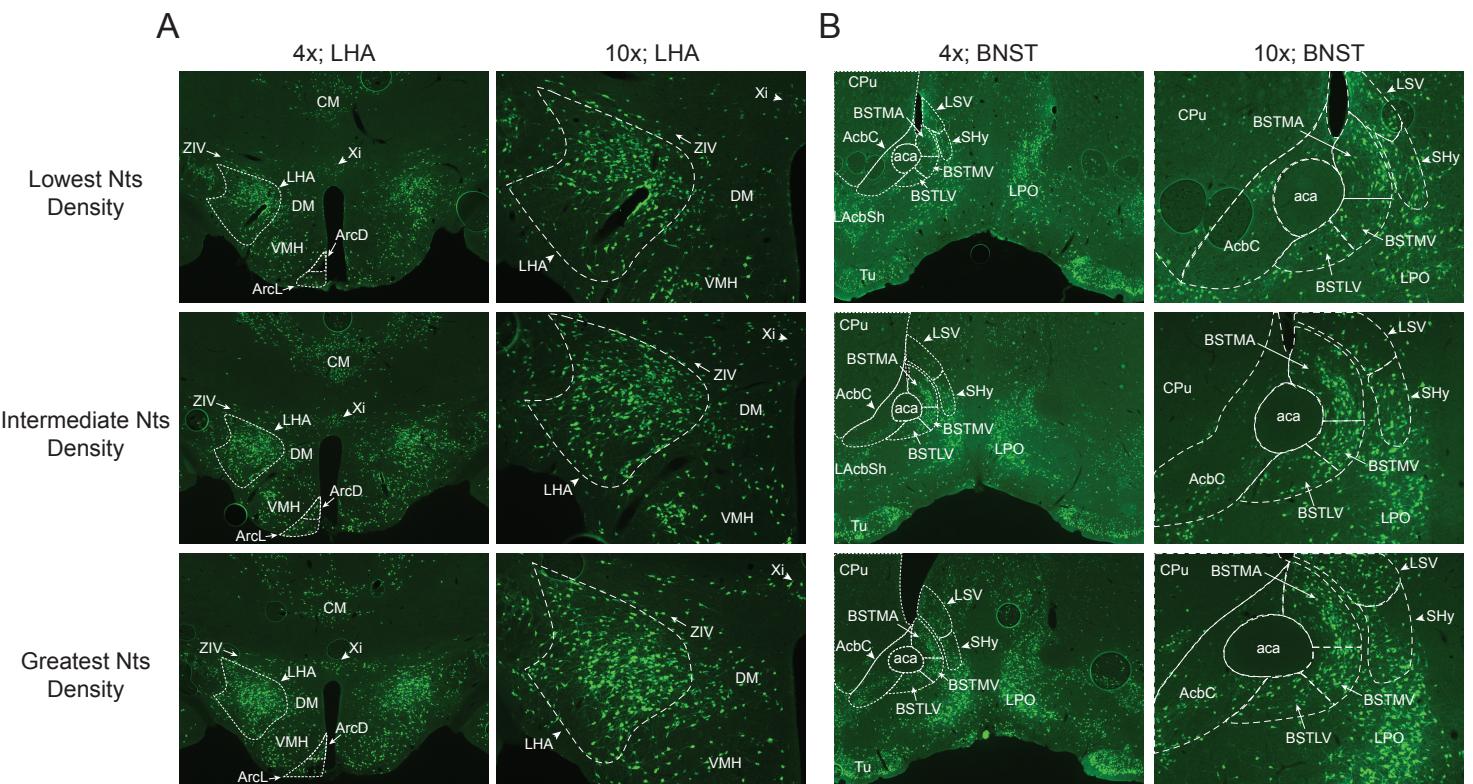


Supplementary Figure 1: Negative and Positive controls for 1° and 2° Antibodies used to detect GFP.

Coronal images of the mouse brain at the level of the lateral hypothalamic area (LHA), a region known to contain Nts-expressing neurons. The dashed line area indicates the LHA. Each row includes a 4x image of the LHA on the left and a 10x image of the same LHA section on the right. **A)** Analysis of a mouse that is heterozygous for the GFP allele but lacks Cre recombinase (+ +; GFP). Separate series of brain sections were exposed to only the primary (1°) antibody for GFP (top images), only the secondary (2°) antibody (Alexa-488; middle images), or both the 1° and 2° antibodies; none of these conditions yielded any GFP signal. These data confirm that the GFP reporter line used in this study is not “leaky” and that no GFP is expressed in the absence of Cre-mediated recombination.

B) Analysis of a mouse that is heterozygous for both the *Nts*^{Cre} and GFP alleles (*Nts*^{Cre}; GFP), identical to those used in this study to map Nts-GFP neurons. Separate series of brain sections were exposed to only the primary (1°) antibody for GFP (top images) or only with the secondary (2°) antibody (Alexa-488; middle images). A modest amount of GFP cells can be detected within the LHA under these conditions, as is expected due to the endogenous GFP expression in this line. However, exposure to both the 1° GFP antibody followed by the secondary 2° Alexa-488 conjugated antibody considerably enhances the detection of GFP neurons within these brains, permitting easy determination of their location throughout the brain.

Supplementary Figure 2



Supplementary Figure 2. Variability between brains of *Nts*^{Cre};GFP mice. Images provide examples of the natural variation found amongst brains from the three *Nts*^{Cre};GFP mice assessed in this study. For each representative area and each brain assessed, a 4x image of Nts-GFP neurons is included on the left and a 10x image of the same structure is included on the right. From top to bottom, images show a representative region from the brain sample with the lowest density of Nts-GFP neurons, the brain with an intermediate density of Nts-GFP neurons, and the brain with the greatest density of Nts-GFP neurons. **A)** Images show natural variation in densities of LHA Nts-GFP populations (bregma -1.82) between brains of three *Nts*^{Cre};GFP mice. A density rating of ++++ was determined for LHA Nts neurons at bregma coordinate -1.82, and this rating was derived from the brain with the intermediate density of LHA Nts neurons. **B)** Images show natural variation in densities of BNST Nts-GFP populations (bregma 0.50). A density rating of ++/+++ was determined for the BSTMV and BSTMA whereas a density rating of +/++ was determined for the BSTLV, and this rating was derived from the brain with the intermediate density of LHA Nts neurons.

Supplemental Table 1: Relative Density of Nts-GFP Neurons and *Nts*-ISH in the Mouse Brain. Caudal to rostral list of brain regions observed to contain Nts-GFP neurons and the Bregma coordinates at which they were found. The relative density of *Nts*-ISH was assessed in each of these regions from the publicly accessible Allen Brain dataset of coronal *Nts*-ISH images, and their corresponding Bregma coordinates are given (Lein et al., 2007) (© 2004 Allen Institute for Brain Science. Allen Mouse Brain Atlas. Available from: mouse.brain-map.org). Relative density ratings: +++++ = Very dense distribution of soma that nearly overlap; ; ++++/++++ = dense distribution of soma but no overlap; +++ = Numerous distributed soma; ++/+++ = Intermediate; ++ = Moderate density of soma; +/++ = Some scattered soma; + = Sparse soma; 0/+ = Very few if any soma noted.

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Abbreviation	Structure	Relative Density of Nts-GFP Cells	Relative Density of Nts- ISH Cells (Allen Brain)
SolC	Solitary nucleus, commissural part	+/++	+
Rob	Raphe obscurus nucleus	+	0/+
Ramb	Retroambiguous nucleus	++	+/++
Sp5C	Spinal trigeminal tract, caudal part	+++/++++	+++/++++
Irt	Intermediate reticular nucleus	++	+
MdD	Medullary reticular nucleus, dorsal part	+/++	0/+
MdV	Medullary reticular nucleus, ventral part	++	0/+
10N	Dorsal motor nucleus of vagus	+/++	++++
12N	Hypoglossal nucleus	++++	++++
Gr	Gracile nucleus	++/+++	++/+++
IOA/IOB	Inferior olive, subnucleus A and B of the medial nucleus	+++	0/+
CuR	Cuneate nucleus, rotundus part	+++	++/+++
SolCL	Solitary nucleus, ventrolateral part	+	+
CeCv	Central cervical nucleus of the spinal cord	+	+
SolM	Solitary nucleus, medial part	++	+/++
SolC/SolIM	Solitary nucleus, ventral part and intermediate part	++	+/++
Cu/cu	Cuneate nucleus and fasciculus	+++	+++
SolDL	Solitary nucleus, dorsolateral part	++	+
SubP	Subpostrema area	+	0/+
IOPr	Ambiguus nucleus	+	++/+++
Soll	Solitary nucleus, interstitial part	+	+/++
Sp5I	Spinal trigeminal nucleus, interpolar part	+++	+
Mx	Matrix region of the medulla	+	+
SolCe	Solitary nucleus, central part	+/++	+
AP	Area postrema	++/+++	++/+++
IOC	Inferior olive, subnucleus C of medial nucleus	++/+++	0/+
IOD	Inferior olive, dorsal nucleus	++/+++	0
IOPr	Inferior olive, principal nucleus	+	0

Abbreviation	Structure	Relative Density of Nts-GFP Cells	Relative Density of Nts- ISH Cells (Allen Brain)
Rpa	Raphe pallidus nucleus	+	0
LRt	Lateral reticular nucleus	0/+	0/+
RVRG	Rostral ventral respiratory group	+	0
CVL	Caudoventrolateral reticular nucleus	+	0
Ro	Nucleus of Roller	0/+	0/+
PCRt	Parvicellular reticular nucleus	+/++	+
SolG	Solitary nucleus, gelatinous part	0/+	0/+
Mve	Medial vestibular nucleus	+/++	+
SpVe	Spinal vestibular nucleus	+/++	+/++
Gi	Gigantocellular reticular nucleus	0/+	0/+
SolDM	Solitary nucleus, dorsomedial part	+	+
IODM	Inferior olive, dorsomedial cell group	+/++	0
SolL	Solitary nucleus, lateral part	+	+
5Sol	Trigeminal-solitary transition zone	+	+/++
Pr	Prepositus nucleus	0/+	0/+
GiV	Gigantocellular reticular nucleus, ventral part	+	0/+
DPGi	Dorsal paragigantocellular nucleus	0/+	0/+
LPGi	Lateral paragigantocellular nucleus	0/+	0/+
IOM	Inferior olive, medial nucleus	++	+
Fve	F cell group of the vestibular complex	+	0
Bo	Botzinger complex	0/+	0
RVL	Rostroventrolateral reticular nucleus	0/+	0
MVeMC	Medial vestibular nucleus, magnocellular part	+	+
DMSp5	Dorsomedial spinal trigeminal nucleus	+/++	++/+++
DC	Dorsal cochlear nucleus	++	++
GiA	Giganotcellular reticular nucleus, alpha part	+	0/+
IS	Inferior salivatory nucleus	+	0
X	nucleus X	0/+	0/+
Y	nucleus Y	0/+	+

Abbreviation	Structure	Relative Density of Nts-GFP Cells	Relative Density of Nts- ISH Cells (Allen Brain)
PCrta	Parvicellular reticular nucleus, alpha part	+/++	+/++
Lve	Lateral vestibular nucleus	0/+	0/+
DCFu	Dorsal cochlear nucleus, fusiform layer	+++/++++	+++/++++
RMg	Raphe magnus nucleus	0/+	0/+
DCDp	Dorsal cochlear nucleus, deep layer	++	+
VeCb	Vestibulocerebellar nucleus	0/+	0/+
7VM, 7DM, 7DI, 7DL, 7L 7VI	Facial nucleus subnuclei	+++	+/++
SuVe	Superior vestibular nucleus	++	+
Sp5O	Spinal trigeminal nucleus, oral part	+/++	+
MVePC	Medial vestibular nucleus, parvicellular part	++/+++	++/+++
Sge	Supragenual nucleus	0/+	0/+
7N	Facial nucleus	+++/++++	+++/++++
6N	Abducens nucleus	+	0
Pa6	Paraabducens nucleus	+	0/+
6RB	Abducens nucleus, retractor bulbi part	++/+++	+++/++++
GrC	Granule cell layer of cochlear nuclei	++	+
P7	Perifacial zone	+/++	0
LC	Locus coeruleus	+	0
A5	A5 noradrenaline cells	+++/++++	+++/++++
Eve	Nucleus of origin of the efferent fibers of the vestibular nerve	+	0
VCA	Ventral cochlear nucleus, anterior part	+++	0
SPO	Superior paraolivary nucleus	+	0/+
PR5DM	Principal sensory trigeminal nucleus, dorsomedial part	+	0
MPBE	Medial parabrachial nucleus, external part	+/++	+/++
PnR	Pontine raphe nucleus	+	0/+
CGA	Central gray, alpha part	+/++	+
CGB	Central gray, beta part	0/+	+
LPBD	Lateral parabrachial nucleus, dorsal part	+++/++++	0/+
LPBE	Lateral parabrachial nucleus, external part	+++/++++	+++/++++

Abbreviation	Structure	Relative Density of Nts-GFP Cells	Relative Density of Nts- ISH Cells (Allen Brain)
5Tr	Trigeminal transition zone	0/+	0
DTgC	Dorsal tegmental nucleus, central part	+	0
DTgP	Dorsal tegmental nucleus, pericentral part	+	0
LPBI / LPBV / LPBS	Lateral parabrachial nucleus, internal part/ ventral part/ superior part	+	0/+
LPBC	Lateral parabrachial nucleus, central part	+++/++++	+++/++++
LDTgV	Laterodorsal tegmental nucleus, ventral part	+/-++	++/+++
SubCD	Subcoeruleus nucleus, dorsal part	+	+
5ADi	Motor trigeminal nucleus, anterior digastric part	++	0/+
CnF	Cuneiform nucleus	+++/++++	++/+++
KF	Koelliker-fuse nucleus	+++/++++	++++
Su5	Supratrigeminal nucleus	++/+++	+
5N	Motor trigeminal nucleus	++	++
CIC	Central nucleus of the inferior colliculus	0/+	0/+
PR5VL	Principal sensory trigeminal nucleus, ventrolateral part	+++/++++	0
MPG	Medial parabrachial nucleus	+++	+++
LDTg	Laterodorsal tegmental nucleus	++/+++	+++
PnC	Pontine reticular nucleus, caudal part	+/-++	0/+
Sag	Sagulum nucleus	+++/++++	+
DMTg	Dorsomedial tegmental area	+/-++	0/+
DCIC	Dorsal cortex of the inferior colliculus	++/+++	0/+
ECIC	External cortex of the inferior colliculus	+/-++	0/+
5TT	Motor trigeminal nucleus, tensor tympani part	+	+
DRC	Dorsal raphe nucleus, caudal part	++/+++	+/-++
SubCV	Subcoeruleus nucleus, ventral part	+/-++	++
cic	Commissure of inferior colliculus	0/+	0
PR5	Principal sensory trigeminal nucleus	++++	0
DRD	Dorsal raphe nucleus, dorsal part	++++	++++
Tz	Nucleus of the trapezoid body	+	0
LPAG	Lateral periaqueductal gray	+++/++++	+/-++

Abbreviation	Structure	Relative Density of Nts-GFP Cells	Relative Density of Nts- ISH Cells (Allen Brain)
VLPAG	Ventrolateral periaqueductal gray	+++/++++	+++/++++
DMPAG	Dorsomedial periaqueductal gray	+++/++++	0
P5	Peritrigeminal zone	++	+
DLL	Dorsal nucleus of the lateral lemniscus	++	++
DRI	Dorsal raphe nucleus, interfascicular part	+++	+++/++++
DLPAG	Dorsolateral periaqueductal gray	+++/++++	0
DpGi	Deep gray layer of the superior colliculus	+++/++++	+
DpWh	Deep white layer of the superior colliculus	+++/++++	0/+
TrLL	Triangular nucleus, lateral lemniscus	+	0
DRV	Dorsal raphe nucleus, ventral part	+++	++++
CAT	Nucleus of the central acoustic tract	+	0
MPL	Medial paralemniscal nucleus	+	0
PDR	Posteriorodorsal raphe nucleus	++	++
PrCnF	Precuneiform area	+++/++++	++/+++
PMnR	Paramedian raphe nucleus	+	0/+
PLV	Perilemniscal nucleus, ventral part	+	0
II	Lateral lemniscus	+++	++/+++
Pa4	Paratrochlear nucleus	0/+	0/+
VLL	Ventral nucleus of the lateral lemniscus	+	0
SuG	Superficial gray layer of the superior colliculus	0/+	0
DRL	Dorsal raphe nucleus, lateral part	++/+++	++
SPTg	Subpeduncular tegmental nucleus	++/+++	+/++
ILL	Intermediate nucleus of the lateral lemniscus	0/+	0
InG	Intermediate gray layer of the superior colliculus	++/+++	+
InWh	Intermediate white layer of the superior colliculus	++/+++	0/+
MiTg	Microcellular tegmental nucleus	+++/++++	++/+++
PBG	Parabigeminal nucleus	+++/++++	+
PTg	Pedunculotegmental nucleus	++	++
PnO	Pontine reticular nucleus, oral part	+/++	+/++

Abbreviation	Structure	Relative Density of Nts-GFP Cells	Relative Density of Nts- ISH Cells (Allen Brain)
Cli	Caudal linear nucleus of the raphe	0/+	0/+
3N	Oculomotor nucleus	++/+++	0/+
Su3C	Supraoculomotor cap	++/+++	+/++
Su3C	Supraoculomotor periaqueductal gray	++/+++	+/++
3PC	Oculomotor nucleus, parvicellular part	++/+++	+
STr/S	Subiculum Transition Area/ Subiculum	++++	++++
Ment	Medial Entorhinal Cortex	+/++	++
Cent	Caudomedial Entorhinal Cortex	++	++
PRh	Perirhinal Cortex	+/++	0
PnO	Pontine Reticular nucleus, Oral part	+	0
rs	Rubrospinal tract	++	0/+
VIEnt	Ventral Intermediate Entorhinal Cortex	+/++	+++
DLEnt/Lent	Dorsolateral/Lateral Entorhinal Cortex	+/++	++
SubB	Subbrachial nucleus	+++/++++	+++/++++
MnR	Median raphe nucleus	+/++	0/+
mRt	Mesencephalic reticular formation	++/+++	+/++
Op	Optic nerve layer of the superior colliculus	++	0/+
EW	Edinger-westphal nucleus	+	0/+
mlf	Medial longitudinal fasciculus	+/++	+
PIF	Parainterfascicular nucleus of the Ventral Tegmental Area	0/+	0
PN	Paranigral nucleus of the Ventral Tegmental Area	0/+	0
RSG/RSD	Retrosplenial Granular/Dysgranular Cortex	++++	0
RRF	Retrorubral field	++	++
PaR	Pararubral nucleus	+	0
IPR	Interpeduncular nucleus, rostral subnucleus	+	0
mRt	Mesencephalic Reticular Formation	+/++	0/+
IPDM	Interpeduncular nucleus, dorsomedial subnucleus	0/+	0
DpGi	Deep Gray Layer of the Superior Colliculus	++/+++	0
IPDL	Interpeduncular nucleus, dorsolateral subnucleus	0/+	0

Abbreviation	Structure	Relative Density of Nts-GFP Cells	Relative Density of Nts- ISH Cells (Allen Brain)
IPDM	Interpeduncular nucleus, dorsomedial subnucleus	0/+	0
IPC	Interpeduncular nucleus, caudal subnucleus	0/+	0
IPI	Interpeduncular nucleus, intermediate subnucleus	0/+	0
IPL	Interpeduncular nucleus, lateral subnucleus	0/+	0
MA3	Medial accessory oculomotor nucleus	+	0/+
DpWh	Deep White Layer of the Superior Colliculus	++	0
DS	Dorsal Subiculum	++++	++++
VS	Ventral Subiculum	++++	++++
BIC	nucleus of the Brachium of the Inferior Colliculus	+++/++++	+++/++++
MGV	Medial Geniculate nucleus, Ventral part	+++	0
InC/InCSH	Interstitial nucleus of Cajal w/ shell region	++	0
Apri	Amygdalopiriform transition area	++/+++	0
PRh	Perirhinal cortex	0/+	0
Dk	Nucleus of Darkschewitsch	+++	+
bic	Brachium of the Inferior Colliculus	++++	+++/++++
DIEnt	Dorsointermedial Entorhinal Cortex	+	+/++
MGM	Medial Geniculate nucleus, Medial	+++/++++	++/+++
PoT	Posterior Thalamic nucleus, Triangular	+++/++++	+
PIL	Posterior Intralaminar Thalamic nucleus	+++/++++	++/+++
PP	Peripeduncular nucleus	+++/++++	++/+++
SG	Suprageniculate Thalamic nucleus	+++/++++	++/+++
PMCo	Posteromedial cortical amygdalar nucleus	0/+	0
csc	Commissure of the superior colliculus	0/+	0
mtg	mammillotegmental tract	+/++	++
scp	Superior cerebellar peduncle	+	0/+
LT	Lateral terminal nucleus acc optic tract	++	0
APT	Anterior pretectal nucleus	+/++	0
ZIC	Zona incerta, caudal	++/+++	0/+
IF	Interfascicular nucleus	+	0

Abbreviation	Structure	Relative Density of Nts-GFP Cells	Relative Density of Nts- ISH Cells (Allen Brain)
p1Rt	p1 reticular formation	+/++	0
MCPC	Magnocellular nucleus post comm	+/++	0
ML	Medial mammillary nucleus, lateral	+++	0
MM	Medial mammillary nucleus, medial	+++/++++	++++
PBP	Parabrachial pigmented nucleus of the Ventral Tegmental Area	+/++	0
fr	Fasciculus retroflexus	+	0
VTA	Ventral tegmental area	+	0
Pli	Posterior Limitans Thalamic nucleus	++	0
PrEW	Pre-edinger-westphal nucleus	0/+	0
Reth	Retroethmoid nucleus	+/++	0/+
pc	Posterior commissure	0/+	0
LM	Lateral mammillary nucleus	+++/++++	0
rmx	Retromammillary decussation	+/++	0
OPT	Olivary pretectal nucleus	0/+	0
Pir	Piriform Cortex	+	+
PAG	Periaqueductal Gray	+++/++++	+
PSTh	Parasubthalamic nucleus	++++	++++
RML	Retromammillary nucleus, Lateral	++/+++	0
SNC/SNR	Substantia Nigra Compacta/Reticular	+++	0/+ (SNC), + (SNR)
LPMC	LP Thalamic nucleus, Mediocaudal	++/+++	0
PMV	Premammillary nucleus, Ventral	++++	+++/++++
ZID/ZIV	Zona Incerta, Dorsal/Ventral	++	+/++ (ZIV)
Py	Pyramidal Cell Hippocampus	++++	0/+
LPLR	LP Thalamic nucleus, Laterorostral	+/++	0
LPMR	LP Thalamic nucleus, Mediorostral	+/++	0
APTD	Anterior Pretectal nucleus, Dorsal	+	0
STh	Subthalamic nucleus	++++	++++
Te	Terete hypothalamic nucleus	+	0
PR	Prerubral Field	+/-/+++	0

Abbreviation	Structure	Relative Density of Nts-GFP Cells	Relative Density of Nts- ISH Cells (Allen Brain)
FF	Fields of Forel	++/+++	0
pv	Paraventricular fiber system	+++	+/++
ArCLP/ArcMP	Caudal Arcuate Hypothalamic nucleus	++	0
PH	Posterior Hypothalamic nucleus	+++	+/++
BLP	Basolateral Amygdalar nucleus, posterior	++	+/++
BMP	Basomedial Amygdalar nucleus, posterior	++	++
BLA	Basolateral Amygdalar nucleus, Anterior	0/+	0
BLV	Basolateral Amygdalar nucleus, Ventral	++/+++	++
BMA	Basomedial Amygdalar nucleus, Anterior	++/+++	++
D, MDL, MDC, MD	Mediodorsal Thalamic nucleus	++	0
PF	Parafascicular Thalamic nucleus	++	0
CM	Central Medial Thalamic nucleus	++/+++	0
PVP	Paraventricular Thalamic nucleus, Posterior	+++	+
PV	Paraventricular Thalamic nucleus	+++	0
Po	Posterior Thalamic nuclear group	++	0
SPF	Subparafascicular Thalamic nucleus	+++	0
PoMn	Posteromedian Thalamic nucleus	++	0
PHD	Posterior Hypothalamic Area, Dorsal	++	+
VMH	Ventromedial Hypothalamic nucleus	++	0
MePD/MePV	Medial Amygdalar nucleus, posteroventral and posterodorsal	++	++ (no MePV)
Ast	Amygdalostriatal transition	++	++/+++
ns	nigrostriatal bundle	+++	++/+++
DMV	Dorsomedial Hypothalamic nucleus, Ventral	++	0
AHiAL	Amygdalohippocampal Area, anterolateral	++	+/++
PVH	Paraventricular nucleus of the Hypothalamus	0/+	0
CL	Centrolateral Thalamic nucleus	++	0
PC	Paracentral Thalamic nucleus	++	0
DEN/VEN	Dorsal and Ventral Endopiriform nucleus	+/++	+/++ (VEN); + (DEN)
LHA	Lateral Hypothalamus	++++	+++

Abbreviation	Structure	Relative Density of Nts-GFP Cells	Relative Density of Nts- ISH Cells (Allen Brain)
PeF	Perifornical nucleus	+++	++
CEA	Central Amygdalar nucleus	++++	++++
ArcD/ArcL	Arcuate hypothalamic nucleus, Dorsal/ Lateral	++/+++	0
Xi	Xiphoid Thalamic nucleus	++	0/+
IMD	Intermediodorsal Thalamic nucleus	++/+++	NA
DM	Dorsomedial Hypothalamic nucleus	+	0
PaXi	Paraxiphoid nucleus of Thalamus	++	+
Arc	Rostral Arcuate Hypothalamic nucleus	++++	+/++
BMA	Basomedial Amygdalar nucleus, anterior	++/+++	0
PMCo/PLCo/Aco	Cortical Amygdalar nucleus	++/+++	+/++
STIA	ST, intraamygdalar division	++/+++	++/+++
CxA	Cortex-Amygdala Transition	++/+++	+/++
AV	Anteroventral thalamic nucleus	+/++	0
RchL	Retrochiasmatic, Lateral	+/++	0
EP/MGP	Entopeduncular nucleus	++/+++	0
Cpu	Caudate Putamen	++/+++	++/+++ in very ventral most region, 0/+ elsewhere
MeAD	Medial Amygdalar nucleus, Anterodorsal	++/+++	0
AHP	Anterior Hypothalamic Area, Posterior	++/+++	0
Rch	Retrochiasmatic Area	++	0
ZI	Zona Incerta	0/+	0
ZIR	Zona Incerta, rostral	0/+	0
Py3 CA3	Pyramidal Field CA3 Hippocampus	+	0
IAD	Interanterodorsal thalamic nucleus	+/++	0
IAM	Interanteromedial thalamic nucleus	+/++	0
MeAV	Medial Amygdalar nucleus, Anteroventral	+++	+/++
IM	Intercalated amygdalar nucleus, main	++/+++	0
SO	Supraoptic nucleus	0/+	0
BAOT	Bed nucleus Access of the Olfactory tract	+/++	0
AA	Anterior amygdalar area	++	0

Abbreviation	Structure	Relative Density of Nts-GFP Cells	Relative Density of Nts- ISH Cells (Allen Brain)
VCI	Ventral part of the claustrum	0/+	0
AM	Anteromedial thalamic nucleus	0/+	0
AHC	Anterior Hypothalamic Area, Central	++	0/+
MCPO	Magnocellular preoptic nucleus	+	0
AVDM	Anteroventral thalamic nucleus, dorsomedial	0/+	0
SCh	Suprachiasmatic nucleus	++	++
SM	nucleus stria medullaris	+	0
PVA	Paraventricular Thalamic nucleus, Anterior	+++/++++	+++/++++
VA	Ventral Anterior Thalamic nucleus	+	0
AA	Anterior Amygdalar Area	+//++	0
VLH	Ventrolateral hypothalamic nucleus	+//++	0
ESO	Episupraoptic nucleus	+	0
LA	Lateroanterior hypothalamic nucleus	++	++/++
Rt	Reticular thalamic nucleus	+	0
PT	Paratenial thalamic nucleus	+	0
LOT	nucleus of the Lateral Olfactory tract	+	0
ANS	Accessory neurosecretory nucleus	+	0
AHA	Anterior hypothalamic area, anterior	+//++	+++
TS	Triangular septal nucleus	0/+	0
vhc	Ventral hippocampal commissure	0/+	0
BSTMPL/BSTMPI	Bed nucleus of the stria terminalis, medial division, posterolateral part / posterointermediate part	+//++	+//++
df	Dorsal fornix	0/+	0
Cg	Cingulate Cortex	++++	0
EAC/EAM/EA	Sublenticular extended amygdala	++/+++	0
BSTMPM	Bed nucleus of the stria terminalis, medial division, posteromedial part	0/+	0
HDB	nucleus of the horizontal limb of the diagonal band	+	0
GP	Globus pallidus	0/+	0
BAC	Bed nucleus of the anterior commissure	0/+	0
StHy	Striohypothalamic nucleus	+++/++++	++/++

Abbreviation	Structure	Relative Density of Nts-GFP Cells	Relative Density of Nts- ISH Cells (Allen Brain)
MPO	Medial Preoptic nucleus	++++	+++/++++
MPA	Medial Preoptic Area	+++	++/+++
LPO	Lateral Preoptic nucleus	+++	++/+++
A14	A14 Dopamine cells	++	0
f	fornix	0/+	0
BSTLI	Bed nucleus of the stria terminalis, lateral division, intermediate part	++	+
Sfi	Septofimbrial nucleus	+	0
BSTLP	Bed nucleus of the stria terminalis, lateral division, posterior part	++	++
AVPe	Anteroventral Periventricular nucleus	++++	++/+++
VMPO	Ventromedial Preoptic nucleus	+++/++++	+++
VLPO	Ventrolateral Preoptic nucleus	++/+++	+
BSTLV	Bed nucleus of the stria terminalis, lateral division, ventral part	+/++	++
Tu	Olfactory tubercle	+++/++++	+++/++++
BSTLJ	Bed nucleus of the stria terminalis, lateral division, juxtacapsular part	+	++
BSTMPL	Bed nucleus of the stria terminalis, medial division, posterolateral part	+/++	+/++
StA	Strial part of the Preoptic Area	++	0
BSTLD	Bed nucleus of the stria terminalis, lateral division, dorsal part	++	++++
BSTMA	Bed nucleus of the stria terminalis, medial deivision, anterior part	++/+++	++/+++
Shy	Septohypothalamic nucleus	+++	++
PS	Parastriatal nucleus	+++	++
BSTMV	Bed nucleus of the stria terminalis, medial division, ventral part	++/+++	++/+++
IPAC	Interstitial nucleus of the posterior limb of the anterior commissure	+++	++/+++
LSI	Lateral Septal Nucleus, intermediate part	+++	+++/++++
LSD/LSV	Lateral Septal Nucleus, dorsal / ventral part	+++	+++ (LSD); +++/++++ (LSV)
AcbC	Nucleus Accumbens, Core	*between + and +++	0/+
SIB	Substantia innominata	++/+++	0
Icj	Island of Cajella	++++	+++/++++
AcbSh	Nucleus Accumbens, Shell	++++	++/+++
LAcbSh	Nucleus Accumbens, lateral Shell	+++/++++	+++

Abbreviation	Structure	Relative Density of Nts-GFP Cells	Relative Density of Nts- ISH Cells (Allen Brain)
ICjM	Island of Cajella, Major Island	+++	0
DTT	Dorsal Tenia Tecta	++	0
PrL	Prelimbic Cortex	++	0
IL	Infralimbic Cortex	++	0
Shi	Septohippocampal nucleus	+++	0
Nv	Navicular Postolfactory nucleus	++++	+
VTT	Ventral Tenia Tecta	++/+++	0
AOM	Anterior Olfactory Area, Medial Part	++/+++	0
MO	Medial Orbital Cortex	+/++	0