

Supplementary information S1 | Involvement of NMDA and mGlu receptors in homosynaptic AMPA-LTD induction at various synapses of mammalian CNS (selected references are indicated)

	Brain area	Synapse studied		References	
		stimulated area/fibres	recorded area/neuron	NMDA LTD	mGluR LTD
amygdala (and extended amygdala)	amygdala	internal capsule	Lateral division of the central amygdala (CeAL)	1	-
		internal capsule (thalamic afferents)	lateral amygdala	2	3
		lateral amygdala	lateral amygdala	4	4
		lateral amygdala	basolateral amygdala (BLA)	5	5
		external capsule (cortical afferents)	lateral amygdala	-	6*
	bed nucleus of the stria terminalis	dorsal anterolateral BNST (dBNST) border of the internal capsule	dBNST	-	7
cerebellum	cerebellum	parallel fibre	Purkinje cell	-	8
		climbing fibre	Purkinje cell	-	9
cortex	neocortex	layer 1	layer 2/3	10	-
		layer 2/3	layer 2/3	10	11
		layer 4	layer 2/3	12	13
		layer 5	layer 2/3	14	-
		layer 6	layer 2/3	15	-
		white matter	layer 2/3	16	17

		white matter	layer 4	18	-
		ventrobasal nucleus of the thalamus	layer 4	19	-
		layer 2/3	layer 5	20	21
		layer 5	layer 5	22/ 23	24
		layer 2/3	layer 6	-	20
	hippocampus	Schaffer collateral/commissural afferences	CA1 pyramidal neuron	25	26
		entorhinal cortex	CA1 pyramidal neuron	27	-
		Schaffer collateral/commissural afferences	CA1 interneuron	-	28
		Schaffer collateral/commissural afferences	CA2 pyramidal neuron	29**	29**
		mossy fibre	CA3 interneuron (Ca ²⁺ -permeable AMPAR containing synapse)	-	30
		mossy fibre	CA3 interneuron (Ca ²⁺ -impermeable AMPAR-containing synapse)	31	-
		mossy fibre	CA3 pyramidal neuron	-	32
		CA1 axons (stratum oriens)	burst-spiking subiculum pyramidal cell	33	-
		CA1 axons (stratum oriens)	regular-spiking subiculum pyramidal cell	33	-
		perforant path	granular cell	-	34
		basolateral amygdala	granular cell	35 **	35 **
hypothalamus	paraventricular Nucleus	Lateral to the paraventricular nucleus	magnocellular neurosecretory cell (MNC)	36 **	36 **
	supraoptic nucleus	Dorsal of the supraoptic nucleus	magnocellular neurons	37	-
	arcuate nucleus	Dorsal of the médiobasal hypothamamus	mediobasal neurons	38	38
	suprachiasmatic nucleus	Optic nerve	suprachiasmatic nucleus neurons	-	39**

striatum	dorsal striatum	cortex/white matter	medium spiny neuron	-	40
		dorsal striatum	medium spiny neuron	-	41
		dorsal striatum	dorsal striatum	42	43
		dorsal striatum	lateral globus pallidus projecting medium spiny neuron	-	44
		cortex (layer 5)	GABAergic interneuron	45	-
		cortex (layer 5)	cholinergic interneuron	-	45
	Ventral striatum	prelimbic synaptic cortical input	nucleus accumbens medium spiny neurons	46	47
Sub-thalamus	subthalamic nucleus	rostral subthalamic nucleus	subthalamic nucleus neurons	48**	48**
midbrain	substantia nigra pars compacta	substantia nigra pars compacta	dopaminergic neurons of substantia nigra pars compacta	-	-
	ventral tegmental area	ventral tegmental area	dopaminergic neurons of ventral tegmental area	-	49
	superior colliculus	stratum opticum	narrow field vertical neurons of the stratum griseum superficiale	50	51***
brain stem	medial vestibular nuclei (MVN)	vestibular afferents (8th cranial nerve)	dorsal portion of MVN	52	53
	nucleus tractus solitarius	tractus solitarius	medial nucleus tractus solitarius neurons	54	-

spinal cord	dorsal horn	Aδ Fibre	substantia gelatinosa neuron	55	56
		C Fibre	substantia gelatinosa neuron	57	-
		dorsomedial white matter (DMWM)	nucleus in the intermediate gray region (just below DMWM)	-	58****
	ventral horn	dorsal horn / intermediate nucleus border	ventral horn	-	59****

* LTD induction required a previous priming HFS

** The study demonstrates the existence of LTD without defining its NMDA or mGluR dependency

*** LTD is induced with at least 1 mM DHPG

**** NMDA could be playing an indirect role too

To the author's knowledge, the specific form of LTD referred in the column has not been demonstrated to occur

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