

Brain region	Cell type/ Vessel type	GGA1-expression in normal aged human brain	GGA1-expression in AD	AD-pathology
Frontal cortex	Neurons	Faintly-moderately stained pyramidalneurons in layers III and V; other neurons do not show a significant expression	Faintly-moderately stained pyramidalneurons in layers III and V; other neurons do not show a significant expression	Senile plaques exhibiting GGA1-positive microglial cells
	Astrocytes	-	infrequently +	
	Oligodendrocytes	-	-	
	Neuropil/ white matter	Neuropil +/- white matter -	Neuropil +/- white matter -	
Occipital cortex	Neurons	Unstained-faintly stained neurons in layers III and V; other neurons do not show a significant expression	Unstained-faintly stained neurons in layers III and V; other neurons do not show a significant expression	Senile plaques exhibiting GGA1-positive microglial cells
	Astrocytes	in a single case	infrequently +	
	Oligodendrocytes	-	-	
	Neuropil/ white matter	Neuropil +/- white matter -	Neuropil +/- white matter -	
Hippocampus	Neurons	Subiculum, CA1: weakly positive; CA2-CA4: strongly positive; dentate gyrus: negative-faintly positive; temporal neocortex: pyramidal neurons inlayers III and V moderately-strongly positive; entorhinal cortex: pre- α neurons : strongly positive; other neuro	Subiculum, CA1: weakly positive; CA2-CA4: strongly positive; dentate gyrus: negative-faintly positive; temporal neocortex: pyramidal neurons inlayers III and V moderately-strongly positive; entorhinal cortex: pre- α neurons : strongly positive; other neuro	Senile plaques in CA1 and the subiculum sector exhibiting GGA1-positive microglial cells
	Astrocytes	In single cases in CA4 positive	In the temporal isocortex and in single cases in CA4 infrequently positive	
	Oligodendrocytes	-	-	
	Neuropil/ white matter	Neuropil +/- white matter -	Neuropil +/- white matter -	
Basal ganglia	Neurons	Putamen: -; Globus pallidus: positive	Putamen: -; Globus pallidus: positive	
	Astrocytes	In single cases positive	In single cases positive	
	Oligodendrocytes	-	-	
	Neuropil/ white matter	Neuropil +/- white matter -	Neuropil +/- white matter -	
Thalamus	Neurons	Neurons moderately positive	Neurons moderately positive	
	Astrocytes	-	-	
	Oligodendrocytes	-	-	
	Neuropil/ white matter	Neuropil +/- white matter -	Neuropil +/- white matter -	
Midbrain	Neurons	Substantia nigra and central gray:-; oral raphe nucleus: positive	Substantia nigra and central gray:-; oral raphe nucleus: positive	
	Astrocytes	-	-	
	Oligodendrocytes	-	-	
	Neuropil/ white matter	Neuropil +/- white matter -	Neuropil +/- white matter -	
Medulla oblongata	Neurons	Brain stem nuclei: VIII-XII, neurons of the reticular nuclei, of the inferior olivary nucleus and the raphe obscurus nucleus; Neurons of the intermediate reticular zone (variable expression)	Brain stem nuclei: VIII-XII, neurons of the reticular nuclei, of the inferior olivary nucleus and the raphe obscurus nucleus; Neurons of the intermediate reticular zone (variable expression)	
	Astrocytes	-	-	
	Oligodendrocytes	-	-	
	Neuropil/ white matter	Neuropil +/- white matter -	Neuropil +/- white matter -	
Cerebellum	Neurons	Purkinje-cells: faintly-significantly positive positive; granule cells negative; dentate nucleus positive	Purkinje-cells: faintly-significantly positive positive; granule cells negative; dentate nucleus positive	
	Astrocytes	-	-	
	Oligodendrocytes	-	-	
	Neuropil/ white matter	Neuropil +/- white matter -	Neuropil +/- white matter -	
Leptomenigeal vessels	Arteries	smooth muscle cells: +	smooth muscle cells: +	Reduction of GGA1-positive smooth muscle cells due to CAA
	Veins	smooth muscle cells: +	smooth muscle cells: +	Reduction of GGA1-positive smooth muscle cells due to CAA
Cortical vessels	Arteries	smooth muscle cells: +	smooth muscle cells: +	Reduction of GGA1-positive smooth muscle cells due to CAA
	Veins	smooth muscle cells: +	smooth muscle cells: +	-
	Capillaries	-	-	-
White matter vessels	Arteries	smooth muscle cells: +	smooth muscle cells: +	Reduction of GGA1-positive smooth muscle cells/ endothelial proliferation due to AS/LH
	Veins	smooth muscle cells: +	smooth muscle cells: +	-
	Capillaries	-	-	-