

Table S1 Antibodies used for immunofluorescence, immunohistochemistry, and western blotting

Target (alternative name) [antibody clone]	Source	Catalogue number	Host	Dilution (IF/IHC)	Antigen retrieval	Dilution (WB)
alpha-Synuclein (fibrillar) [Syn-F1]	Biolegend	847802	Mouse	1:500	Citrate buffer	–
alpha-Synuclein (oligomeric and fibrillar) [Syn-O2]	Biolegend	847602	Mouse	1:500	Citrate buffer	–
alpha-Synuclein (phospho S129) [EP1536Y]	Abcam	AB51253	Rabbit	1:200	Citrate buffer	1:1000
alpha-Synuclein (phospho S129) [pSyn#64]	Wako	015-25191	Mouse	1:1200	Citrate buffer	–
alpha-Synuclein (phospho S129) [pSyn#64], biotin-conjugated	Wako	010-26481	Mouse	1:1000	Citrate buffer	–
GAPDH	Abcam	ab226408				1:1000
Glial fibrillary acidic protein (GFAP)	Dako	Z0334	Rabbit	1:400	Citrate buffer	–
Iba1	Wako	019-19741	Rabbit	1:500	Citrate buffer	–
p62 (sequestosome-1)	Proteintech	18420-1-AP	Rabbit	1:100	Citrate buffer	–
Ubiquitin (Ubi-1)	Merck Millipore	MAB1510	Mouse	1:500	Formic acid	–