

DISEASE RESEARCH OVERVIEW AND TABLE OF STAINS

The table below depicts some of the most commonly used stains for detecting various categories of markers in Alzheimer (AD), Parkinson (PD), Multiple Sclerosis (MS), Amyotrophic Lateral Sclerosis (ALS), Huntington (HD), and Stroke research.

Stain	AD	PD	MS	ALS	HD	Stroke
4H7H7 Huntington Disease Aggregates					AG	
6E10 β -Amyloid (1-17)	A					
82E1 β -Amyloid (1-16)	A					
AChE	cN	cN	cN	cN	cN	cN
Amino CuAg	Dg	Dg	Dg	Dg	Dg	Dg
ApoTag 4	CD	CD	CD	CD	CD	CD
A β (1-40)	A					
A β (1-42)	A					
α -Synuclein		cN				
α -Synuclein (pSer129)		cN				
α -Synuclein-Human 4B12 (103-108)		cN				
α -Synuclein 211 (121-125)		cN				
Autometallography	MetD	MetD	MetD	MetD	MetD	MetD
c-Fos	act	act	act	act	act	act
Calbindin	cN	cN	cN	cN	cN	cN
Calretinin	cN	cN	cN	cN	cN	cN
Campbell-Switzer	A, pT					
Caspase-3-activated	CD	CD	CD	CD	CD	CD
Caspase-9-activated	CD	CD	CD	CD	CD	CD
CD11b	G	G	G	G	G	G
CD68	rG	rG	rG	rG	rG	rG
ChAT	cN	cN	cN	cN	cN	cN
Congo Red	A, pT					
CuAg	Dg	Dg	Dg	Dg	Dg	Dg
DARPP32		cN				
EM-48					AG	
Ferritin	cN	cN	cN	cN	cN	cN
GABA						cN
GFAP	Ast	Ast	Ast	Ast	Ast	Ast
Glutamate					cN	
H&E	cN	cN	cN	cN	cN	cN
Human Nuclear Protein (HuNu)	cN	cN	cN	cN	cN	cN
Huntingtin					cN	
Iba1	G	G	G	G	G	G
Ischemia Contrast			plnt			plnt
Ki-67	iN	iN	iN	iN	iN	iN
Nestin	rAst	rAst	rAst	rAst	rAst	rAst
NeuN	cN	cN	cN	cN	cN	cN
Nissl	cN	cN	cN	cN	cN	cN
Parvalbumin						cN
Perls	MetD	MetD	MetD	MetD	MetD	MetD
PSA-NCAM	iN	iN	iN	iN	iN	iN
Reactive Microglia	rG	rG	rG	rG	rG	rG
S100 beta	Ast	Ast	Ast	Ast	Ast	Ast
Serotonin	cN	cN	cN	cN	cN	cN
Serotonin Transporter	cN	cN	cN	cN	cN	cN
SMI-99 myelin basic protein	myl	myl	myl	myl	myl	myl
Solochrome	myl	myl	myl	myl	myl	myl
Somatostatin	cN	cN	cN	cN	cN	cN
Substance P	cN	cN	cN	cN	cN	cN
Synaptophysin	cN	cN	cN	cN	cN	cN
Tau 39E10 (189-205)	pT					
Tau 46 (403-441)	pT					
Tau 5 (210-230)	pT					
Tau AT100 (pSer212/pSer214)	pT					
Tau AT180 (pThr231; PHF-6)	pT					
Tau AT181 (pThr181)	pT					
Tau AT8 (pSer202,pThr205)	pT					
Tau CP-13 (pSer202)	pT					
Tau HT7 (159-163)	pT					
Tau MC1 (312-322)	pT					
Tau PHF-1 (pSer396,404)	pT					
Tau PHF-13 (pSer396)	pT					
Tau (pSer422)	pT					
Thioflavin S	pT	pT				
Tryptophan Hydroxylase		cN				
VChT				cN		
Weil-Myelin	myl	myl	myl	myl	myl	myl

CODE LEGEND:

A = amyloid **CD** = cell death **G** = microglia **plnt** = physical integrity **rG** = reactive marker
act = activity marker **cN** = chemo-specific neuron **iN** = immature Neurons **pT** = phosphorylated Tau- tangles
AG = aggregates **Ast** = astrocytes **Dg** = Degeneration **MetD** = Metal Detection **rAst** = reactive Astrocytes
Ast = astrocytes **Dg** = Degeneration **myl** = myelin