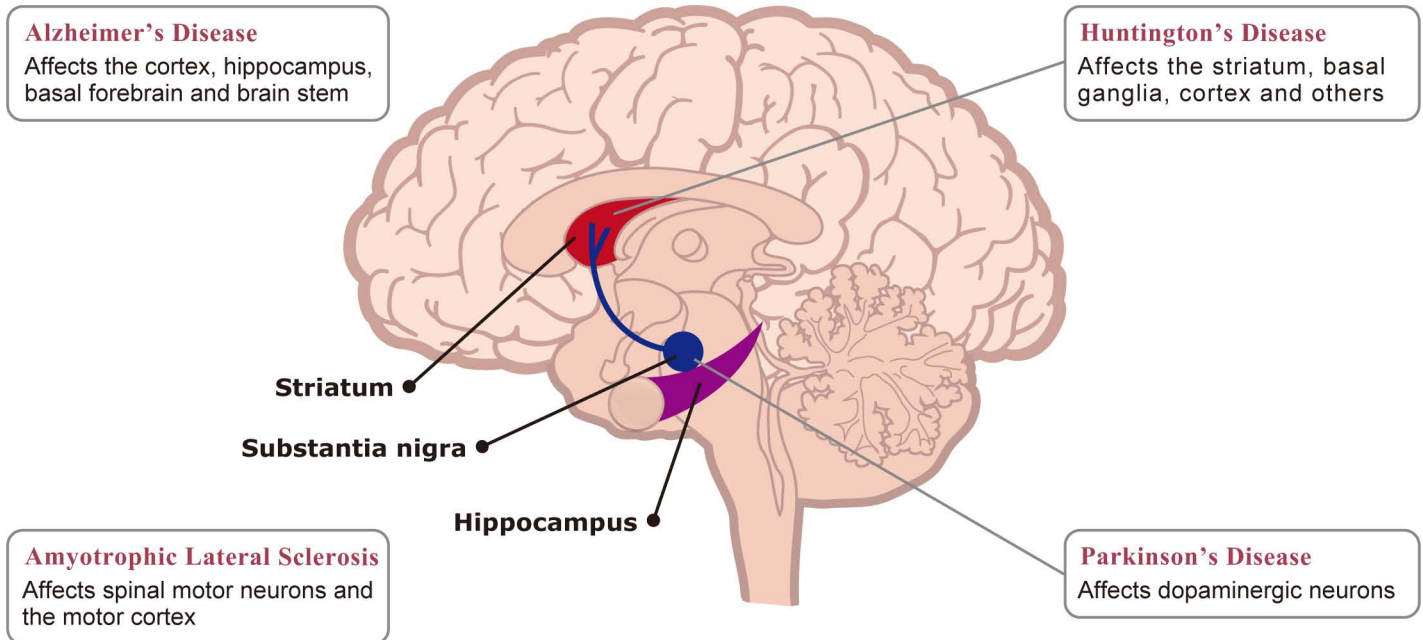




# Neurodegenerative Disorders



Despite a diverse array of clinical manifestations and affected genes, many of the common neurodegenerative disorders share a similar molecular mechanism. Alzheimer's disease (AD), Parkinson's disease (PD), Huntington's disease (HD), amyotrophic lateral sclerosis (ALS) and prion disease are each characterized by the aggregation of mutated or misfolded proteins into amyloid inclusion bodies. Aggregation results when the accumulation of misfolded proteins exceeds the cell's ability to eliminate them via the ubiquitin-proteasome degradation pathway. Some evidence suggests that these inclusions may represent a cellular defense mechanism intended to sequester toxic oligomers or to induce autophagic elimination of the diseased proteins. Effective future strategies for treatment of these neurodegenerative disorders rely on the understanding of the basic pathways affected in these disorders. GeneTex offers a comprehensive selection of antibodies to study the processes involved in neurodegenerative disorders.

Disease	Type of Aggregation	Subcellular Localization	Affected Protein	Brain Region Affected
Alzheimer's Disease (AD)	Neuritic Plaques	Extracellular	Amyloid beta peptide	Cortex, hippocampus, basal forebrain, brain stem
	Neurofibrillary tangles	Intracellular	Hyperphosphorylated Tau	
Parkinson's Disease (PD)	Lewy Body	Intracellular (Cytoplasm)	$\alpha$ -Synuclein	Substantia nigra, cortex, locus ceruleus, raphe (dopaminergic neurons)
Huntington's Disease (HD)	Intranuclear inclusions & cytoplasmic aggregates	Intracellular	Huntingtin with polyglutamate expansion	Striatum, basal ganglia, cortex, others
Amyotrophic Lateral Sclerosis (ALS)	Bonina bodies and axonal spheroids	Intracellular (Cytoplasm)	SOD1, TDP-43, and FUS	Spinal motor neurons and motor cortex
Prion Disease	Amyloid Plaque	Intracellular & Extracellular	Prion protein	Cortex, brain stem, thalamus, cerebellum, other

## Alzheimer's Disease

	Cat. No.	Product Name	Host & Clonality	Reactivity	Application
APP & A $\beta$	GTX61201	Amyloid Precursor Protein [Y188] antibody	Rb mAb	Hu, Ms, Rat	FACS, ICC/IF, IHC, IP, WB
	GTX12338	Amyloid Precursor Protein [3E9] antibody	Ms mAb	Hu, Ms, Rat, Other	IHC-P, WB
	GTX101336	Amyloid beta antibody	Rb pAb	Hu, Ms	WB, ELISA-Ag
	GTX11132	Amyloid beta [DE2B4] antibody	Ms mAb	Hu	IHC-P, IP, WB
	GTX61822	Amyloid beta 40 (A $\beta$ 40) [EP1876Y] antibody	Rb mAb	Hu	WB
	GTX30986	Amyloid beta 42 (A $\beta$ 42) antibody	Rb pAb	Hu, Ms	IP, WB
$\alpha$ Secretase	GTX21997	ADAM10 antibody	Rb pAb	Hu, Ms, Rat	WB
	GTX22051	ADAM17 antibody	Rb pAb	Hu, Ms, Rat	WB
$\beta$ Secretase	GTX62419	BACE1 [EPR3956] antibody	Rb mAb	Hu, Ms, Rat	IP, WB
	GTX28024	BACE2 antibody	Rb pAb	Hu, Ms, Rat	WB
$\gamma$ Secretase	GTX61684	Presenilin 1 [EP2000Y] antibody	Rb mAb	Hu, Ms, Rat	FACS, ICC/IF, IHC, IP, WB
	GTX61582	Presenilin 2 [EP1515Y] antibody	Rb mAb	Hu, Ms, Rat	ICC/IF, IHC, IP, WB
	GTX61916	Nicastrin [EPR2575Y] antibody	Rb mAb	Hu, Ms, Rat	FACS, IP, WB
Secretase	GTX100896	Cathepsin B antibody	Rb pAb	Hu	WB, ELISA-Ag
	GTX46395	Cathepsin B [CB131] antibody	Ms mAb	Hu	IHC-P
	GTX82264	Cathepsin H antibody	Ch pAb	Hu	WB
A $\beta$ -degrading protease	GTX45733	IDE [9B12.225] antibody	Ms mAb	Hu, Hm, Rat, Other	IHC-P, IP, WB
	GTX111664	IDE antibody	Rb pAb	Hu	WB, ELISA-Ag
	GTX62139	Nephrilysin/CD10 [EPR2997] antibody	Rb mAb	Hu, Ms, Rat	FACS, WB
	GTX75137	Nephrilysin/CD10 [SN5c] antibody	Ms mAb	Hu	FACS, IHC-Fr, IP, WB
Calpain	GTX62448	Calpain 1 (large subunit) [EPR3319] antibody	Rb mAb	Hu, Ms, Rat	FACS, ICC/IF, IHC, WB
	GTX16680	Calpain 1 [15C10] antibody	Ms mAb	Hu, Ms, Rat, Other	ELISA, IP, WB
	GTX102499	Calpain 2 antibody	Rb pAb	Hu, Ms	ICC/IF, WB, ELISA-Ag
	GTX61929	Calpain 2 (large subunit) [EPR2562Y] antibody	Rb mAb	Hu	FACS, IP, WB
Plasminogen system	GTX103453	tPA antibody	Rb pAb	Hu	WB, ELISA-Ag
	GTX41049	tPA [2A153] antibody	Ms mAb	Hu	ELISA, WB
	GTX100465	Urokinase / uPA antibody	Rb pAb	Hu	WB, ELISA-Ag
	GTX19893	Urokinase / uPA [SPM457] antibody	Ms mAb	Hu	WB
	GTX10174	Plasminogen [9E7] antibody	Ms mAb	Hu	Apuri, ELISA, IHC-P
Tau	GTX31067	Neurofibrillary Tangles antibody	Rb pAb		ELISA, IHC-P, WB
	GTX116044	Tau antibody	Rb pAb	Hu	IHC-P, WB, ELISA-Ag
	GTX61950	Tau [EP2456Y] antibody	Rb mAb	Hu, Ms, Rat	FACS, ICC/IF, WB
	GTX12356	Tau [TAU 2] antibody	Ms mAb	Hu	IHC-P, WB
	GTX62576	Tau phospho T50 [EPR2396(2)] antibody	Rb mAb	Hu	ICC/IF, IHC, IP, WB
	GTX62137	Tau phospho S198 [EPR2400] antibody	Rb mAb	Hu	ICC/IF, IHC, IP, WB
	GTX62086	Tau phospho S199 [EPR2401Y] antibody	Rb mAb	Hu, Ms, Rat	WB
	GTX62062	Tau phospho S202 [EPR2402] antibody	Rb mAb	Hu, Ms, Rat	IP, WB
	GTX24841	Tau phospho T205 antibody	Rb pAb	Hu, Ms, Rat	WB
	GTX24842	Tau phospho T212 antibody	Rb pAb	Hu, Ms, Rat	WB
	GTX24846	Tau phospho S214 antibody	Rb pAb	Hu	WB
	GTX62077	Tau phospho T217 [EPR2488] antibody	Rb mAb	Hu, Ms, Rat	IP, WB
	GTX62199	Tau phospho S262 [EPR2454] antibody	Rb mAb	Hu	WB
	GTX62256	Tau phospho S356 [EPR2603] antibody	Rb mAb	Hu	ICC/IF, WB
	GTX62470	Tau phospho S396 [EPR2731] antibody	Rb mAb	Hu, Ms, Rat	IP, WB
	GTX24859	Tau phospho S400 antibody	Rb pAb	Hu	WB
	GTX62248	Tau phospho S404 [EPR2605] antibody	Rb mAb	Hu, Ms, Rat	IHC, WB
	GTX24861	Tau phospho S409 antibody	Rb pAb	Hu, Ms, Rat	WB
GTX24862	Tau phospho S422 antibody	Rb pAb	Hu, Ms, Rat	WB	
CDK5 & regulator	GTX108328	CDK5 antibody	Rb pAb	Hu	ICC/IF, WB, ELISA-Ag
	GTX61325	CDK5 (C-term) [EP715Y] antibody	Rb mAb	Hu, Ms, Rat	FACS, ICC/IF, IHC, IP, WB
	GTX23226	CDK5 [DC17] antibody	Ms mAb	Hu, Ms, Rat	ICC/IF, IHC-P, IP, WB
	GTX10570	p35/CDK5R1 antibody	Rb pAb	Hu, Ms, Rat, Other	WB
	GTX19933	p35/CDK5R1 [SPM430] antibody	Ms mAb	Hu	IP
Other related protein	GTX61529	Apo E [EP1374Y] antibody	Rb mAb	Hu, Rat	ICC/IF, IHC, IP, WB
	GTX21907	Apo E [E6D7] antibody	Ms mAb	Hu	ELISA, IHC-Fr, IHC-P, IP, WB
	GTX107718	ALS2CR3 antibody	Rb pAb	Hu	WB, ELISA-Ag
	GTX100301	ERAB antibody	Rb pAb	Hu	ICC/IF, WB, ELISA-Ag
	GTX10260	ERAB [5F3] antibody	Ms mAb	Hu	ELISA, ICC/IF, IHC-Fr, IHC-P, WB
	GTX26345	Factor VIII Heavy chain [RFFVIII/8] antibody	Ms mAb	Hu	ELISA, WB
	GTX62227	FE65 [EPR3538] antibody	Rb mAb	Hu	ICC/IF, IHC, WB
	GTX77707	Mint1/APBA1 antibody	Rb pAb	Hu	WB
GTX104958	RAGE antibody	Rb pAb	Hu	IHC, WB, ELISA-Ag	

## Parkinson's Disease

	<i>Cat. No.</i>	<i>Product Name</i>	<i>Host &amp; Clonality</i>	<i>Reactivity</i>	<i>Application</i>
PARK1 ( $\alpha$ Synuclein)	GTX61609	$\alpha$ Synuclein [EP1646Y] antibody	Rb mAb	Hu, Ms, Rat	ICC/IF, WB
	GTX21903	$\alpha$ Synuclein [4D6] antibody	Ms mAb	Hu, Ms, Rat	ELISA, IHC-Fr, IHC-P, WB
	GTX61607	$\alpha$ Synuclein phospho S129 [EP1536Y] antibody	Rb mAb	Hu, Ms	WB
PARK2 (Parkin)	GTX61308	Parkin [EP668Y] antibody	Rb mAb	Hu, Ms, Rat	FACS, ICC/IF, IHC, WB
	GTX30969	Parkin antibody	Rb pAb	Hu	IP, WB
PARK5 (PGP9.5)	GTX109637	PGP9.5 antibody	Rb pAb	Hu	ICC/IF, WB, ELISA-Ag
	GTX62468	PGP9.5 [EPR4118] antibody	Rb mAb	Hu, Ms, Rat	FACS, IHC, IP, WB
	GTX10358	PGP9.5 [10A1] antibody	Ms mAb	Hu, Ms, Rat	IHC-Fr, WB
PARK6 (PINK1)	GTX107851	PINK1 antibody	Rb pAb	Hu	WB, ELISA-Ag
	GTX62430	PINK1 [EPR2799] antibody	Rb mAb	Hu	ICC/IF, IHC, IP, WB
PARK7 (DJ1)	GTX61972	DJ-1 [EP2815Y] antibody	Rb mAb	Hu, Ms, Rat	ICC/IF, IHC, IP, WB
	GTX61977	DJ-1 [EP2816Y] antibody	Rb mAb	Hu, Ms, Rat	FACS, ICC/IF, IHC, WB
Related Ub ligase	GTX23997	Dorfin antibody	Gt pAb	Hu	ELISA
	GTX113268	SIAH1 antibody	Rb pAb	Hu	WB, ELISA-Ag
	GTX48599	SIAH1/2 [8G7H12] antibody	Ms mAb	Hu, Rat, Zfsh, Other	IHC, WB
	GTX109676	STUB1/CHIP antibody	Rb pAb	Hu	ICC/IF, WB, ELISA-Ag
	GTX62647	STUB1/CHIP [EPR4447] antibody	Rb mAb	Hu, Ms, Rat	ICC/IF, IHC, IP, WB
Parkin substrate	GTX61285	Cyclin E1 [EP435E] antibody	Rb mAb	Hu	FACS, ICC/IF, IP, WB
	GTX61059	Cyclin E2 (C-term) [E142] antibody	Rb mAb	Hu, Ms, Rat	FACS, ICC/IF, IHC, WB
	GTX71159	GPR37/PAELR antibody	Rb pAb	Hu	IHC-P
	GTX118561	Septin 5 antibody	Rb pAb	Hu	WB, ELISA-Ag
	GTX11106	Synphilin 1 antibody	Gt pAb	Hu, Ms, Rat	ELISA, IHC-P, WB
Other related protein	GTX115032	Ataxin 3 antibody	Rb pAb	Hu	IHC, WB, ELISA-Ag
	GTX61616	ALDH1A1 antibody	Rb pAb	Hu	ICC/IF, IHC, IP, WB
	GTX61134	ATF2 (C-term) [E243] antibody	Rb mAb	Hu, Ms	ICC/IF, IHC, IP, WB
	GTX48630	PACRG antibody	Rb pAb	Hu, Rat, Zfsh	WB
Calpain	GTX62448	Calpain 1 (large subunit) [EPR3319] antibody	Rb mAb	Hu, Ms, Rat	FACS, ICC/IF, IHC, WB
	GTX16680	Calpain 1 [15C10] antibody	Ms mAb	Hu, Ms, Rat, Other	ELISA, IP, WB
	GTX102499	Calpain 2 (large subunit) antibody	Rb pAb	Hu, Ms	ICC/IF, WB, ELISA-Ag
	GTX61929	Calpain 2 (large subunit) [EPR2562Y] antibody	Rb mAb	Hu	FACS, IP, WB
	GTX16966	Calpain 2 [28F3] antibody	Ms mAb	Hu, Other	ELISA, IP, WB
	GTX113398	Calpain 3 antibody	Rb pAb	Hu	ICC/IF, WB, ELISA-Ag
	GTX74541	Calpain 3 Antibody	Rb pAb	Hu	IHC, IP, WB
	GTX103264	Calpain 5 antibody	Rb pAb	Hu	ICC/IF, WB, ELISA-Ag
	GTX74542	Calpain 9 Antibody	Rb pAb	Hu	WB
GTX74543	Calpain 10 Antibody	Rb pAb	Hu	IHC, IP, WB	
CDK5 & regulator	GTX108328	CDK5 antibody	Rb pAb	Hu	ICC/IF, WB, ELISA-Ag
	GTX61325	CDK5 (C-term) [EP715Y] antibody	Rb mAb	Hu, Ms, Rat	FACS, ICC/IF, IHC, IP, WB
	GTX23226	CDK5 [DC17] antibody	Ms mAb	Hu, Ms, Rat	ICC/IF, IHC-P, IP, WB
	GTX10570	p35/CDK5R1 antibody	Rb pAb	Hu, Ms, Rat, Other	WB
GTX19933	p35/CDK5R1 [SPM430] antibody	Ms mAb	Hu	IP	

## Huntington's Disease

	<i>Cat. No.</i>	<i>Product Name</i>	<i>Host &amp; Clonality</i>	<i>Reactivity</i>	<i>Application</i>
Htt	GTX61378	Huntingtin [EP867Y] antibody	Rb mAb	Hu, Ms, Rat	FACS, ICC/IF, IHC, WB
	GTX13583	Huntingtin [1A771] antibody	Ms mAb	Hu, Ms	WB
	GTX31044	Huntingtin [HDA3E10] antibody	Ms mAb	Hu, Ms, Rat	ICC/IF, IHC-Fr, IP, WB
Htt-interacting protein	GTX25402	HIP1 [4B10] antibody	Ms mAb	Hu, Rat	WB
	GTX61439	HIP2/UBC1 [EP1145Y] antibody	Rb mAb	Hu, Ms, Rat	ICC/IF, IHC, IP, WB
	GTX106273	HIP14L/ZDHHC13 antibody	Rb pAb	Hu	WB, ELISA-Ag
	GTX107996	HIP14/ZDHHC17 antibody	Rb pAb	Hu	WB, ELISA-Ag
Related transcription factor	GTX111124	HIPPI antibody	Rb pAb	Hu	IHC, WB, ELISA-Ag
	GTX101249	CBP antibody	Rb pAb	Hu	ICC/IF, WB, ELISA-Ag
	GTX30750	CBP [F4] antibody	Ms mAb	Hu, Ms, Rat	ICC/IF, IP, WB
	GTX101260	CREB antibody	Rb pAb	Hu	ICC/IF, WB, ELISA-Ag
	GTX61140	CREB [E306] antibody	Rb mAb	Hu, Ms, Rat	FACS, ICC/IF, IHC, IP, WB
	GTX100671	SP1 antibody	Rb pAb	Hu	WB, ELISA-Ag
	GTX13370	SP1 antibody	Rb pAb	Hu, Ms, Rat, Zfsh, Other	IP, WB
GTX101038	TFIID antibody	Rb pAb	Hu	IHC, WB, ELISA-Ag	
GTX20818	TFIID [1TB18] antibody	Ms mAb	Hu, Ms, Rat	EMSA, IP, WB	

## Huntington's Disease

	<i>Cat. No.</i>	<i>Product Name</i>	<i>Host &amp; Clonality</i>	<i>Reactivity</i>	<i>Application</i>
Related protein for vesicular traffic	GTX11331	Clathrin heavy chain [TD.1] antibody	Ms mAb	Hu, Ms, Rat, Other	WB
	GTX14409	Clathrin light chain [3F133] antibody	Ms mAb	Hu, Ms, Rat, Zfish, Other	ICC/IF, IHC-P, IP, WB
	GTX100231	Dynactin 1 antibody	Rb pAb	Hu	ICC/IF, IHC-P, WB, ELISA-Ag
	GTX11806	Dynactin 2 antibody	Gt pAb	Hu, Ms	ELISA, IHC, WB
Caspase	GTX21872	Caspase 1 antibody	Rb pAb	Hu, Ms, Rat	IHC-Fr, IHC-P, WB
	GTX14367	Caspase 1 [14F468] antibody	Ms mAb	Hu, Rat, Other	IHC-P, WB
	GTX61023	Caspase 2 [Y61] antibody	Rb mAb	Hu, Ms	FACS, WB
	GTX13870	Caspase 2 [18E809] antibody	Ms mAb	Hu, Ms, Rat	WB
	GTX61120	Caspase 3 (Pro) [E83-103] antibody	Rb mAb	Hu, Ms	FACS, ICC/IF, IHC, IP, WB
	GTX61121	Caspase 3 (Active) [E83-77] antibody	Rb mAb	Hu	ICC/IF, IHC, WB
	GTX17868	Caspase 3 [3F49] antibody	Ms mAb	Hu	IHC-P, IP, WB
	GTX61526	Caspase 6 (Pro) [EP1325Y] antibody	Rb mAb	Hu, Ms, Rat	FACS, ICC/IF, IHC, IP, WB
	GTX22326	Caspase 6 (Active) antibody	Rb pAb	Hu, Ms, Rat	WB
	GTX17822	Caspase 6 [3F52] antibody	Ms mAb	Hu	IHC-P, IP, WB
	GTX61010	Caspase 7 [E22] antibody	Rb mAb	Hu	ICC/IF, IHC, IP, WB
	GTX22323	Caspase 7 (Active) antibody	Rb pAb	Hu, Ms, Rat	FACS, IHC-Fr, IP, WB
	GTX22301	Caspase 7 [B4-G2] antibody	Ms mAb	Hu, Ms, Rat	IP, WB
	GTX61001	Caspase 8 (N-term) [E6] antibody	Rb mAb	Hu	FACS, IHC, IP, WB
Other related Protein	GTX115247	Puromycin-sensitive aminopeptidase antibody	Rb pAb	Hu	WB, ELISA-Ag
	GTX61276	Ubiquitin (C-term) [EP296Y] antibody	Rb mAb	Hu, Ms, Rat	IHC, WB
	GTX20122	Ubiquitin [1B4-UB] antibody	Ms mAb	Hu, Other	ELISA, FACS, IHC-Fr, IHC-P, WB

## Amyotrophic lateral sclerosis (ALS)

	<i>Cat. No.</i>	<i>Product Name</i>	<i>Host &amp; Clonality</i>	<i>Reactivity</i>	<i>Application</i>
ALS affected protein	GTX100659	SOD1 antibody	Rb pAb	Hu	ICC/IF, IHC, WB, ELISA-Ag
	GTX61611	SOD1 [EP1727Y] antibody	Rb mAb	Hu, Rat	FACS, ICC/IF, IHC, WB
	GTX114210	TDP-43 antibody	Rb pAb	Hu	ICC/IF, IHC-P, WB, ELISA-Ag
	GTX101810	FUS antibody	Rb pAb	Hu	WB, ELISA-Ag
Other related protein	GTX30730	Nitrotyrosine [39B6] antibody	Ms mAb	Hu, Ms, Rat, Other	IHC, IP, WB
	GTX40953	4 Hydroxynonenal antibody	Gt pAb	Bv	ELISA
	GTX48541	Derlin 1 antibody	Rb pAb	Hu, Other	WB
	GTX61334	Neurofilament H [EP673Y] antibody	Rb mAb	Hu, Ms, Rat	ICC/IF, IHC, WB
	GTX62257	Neurofilament M [EP2460] antibody	Rb mAb	Hu	ICC/IF, IHC, IP, WB
	GTX61428	Neurofilament L (C-term) [EP675Y] antibody	Rb mAb	Hu, Ms, Rat	FACS, IP, WB
GTX17114	200kDa + 70kDa Neurofilament [2F11] antibody	Ms mAb	Hu	IHC-P, IP, WB	

## Prion Disease

	<i>Cat. No.</i>	<i>Product Name</i>	<i>Host &amp; Clonality</i>	<i>Reactivity</i>	<i>Application</i>
PrP	GTX61655	Prion Protein [EP1802Y] antibody	Rb mAb	Hu, Ms, Rat	FACS, ICC/IF, IHC, WB
	GTX14219	Prion protein PrP [7D9] antibody	Ms mAb	Hu, Ms, Other	ELISA, IHC-P, WB
Other related protein	GTX103322	Nrf2 antibody	Rb pAb	Hu	ICC/IF, IHC, WB, ELISA-Ag
	GTX61763	Nrf2 [EP1808Y] antibody	Rb mAb	Hu	ICC/IF, IHC, IP, WB
	GTX77729	Hsp40 antibody	Rb pAb	Hu	WB
	GTX102567	Grp78/Bip antibody	Rb pAb	Hu, Ms	WB, ELISA-Ag
	GTX62643	Grp78/Bip [EPR4041(2)] antibody	Rb mAb	Hu, Ms, Rat	ICC/IF, IHC, WB



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