Library of neurodegenerative disease related compounds includes over 1,500 bioactive compounds targeting 164 proteins from the KEGG database's Neurodegeneration pathways . This diverse selection covers:

• Protein Misfolding: Dysfunction in the ubiquitin-proteasome and autophagy–lysosome systems leads to the accumulation of misfolded proteins like amyloid-beta and alpha-synuclein.

• Oxidative Stress: Excessive oxidative stress damages cellular components, contributing to neuronal death in diseases like ALS and Huntington's disease.

• Endoplasmic Reticulum Stress: Accumulation of misfolded proteins in the ER disrupts cellular function and promotes apoptosis, seen in Alzheimer's and Parkinson's diseases.

• Mitochondrial Dysfunction: Impaired mitochondrial function affects ATP production and increases reactive oxygen species, playing a critical role in neurodegenerativeconditions.

• Disruptions of Axonal Transport: Impaired axonal transport affects the movement of organelles and proteins along axons, leading to neuronal dysfunction and death, observed in ALS and Huntington's disease.

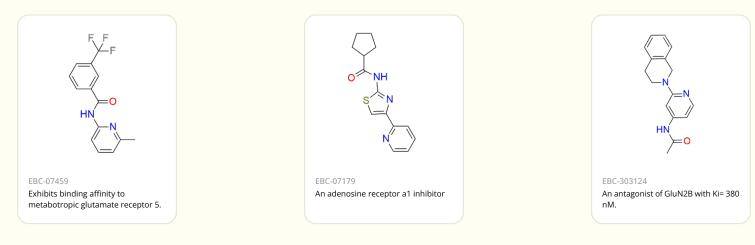
• Neuroinflammation: Chronic inflammation in the nervous system contributes to theprogression of neurodegenerative diseases.

Related terms: Alzheimer's disease, Parkinson's disease, prions, ALS, motor neuron disease, Huntington's disease, spinal muscular atrophy, and spinocerebellar ataxia





Highlights



Library Composition

Name	Occurrence in the library, ti	imes
Genetic information processing		78
Signaling and cellular processes		60
Protein-serine/threonine kinases		29
Membrane trafficking		28
Peptidases and inhibitors		21
Chromosome and associated proteins	_	17
Exosomal proteins	_	16
Mitochondrial biogenesis	_	14
lon channels	_	14
Endocytosis	_	14
Proteasome	_	13
Autophagy	_	12

