Selective Melanotropin Ligands for Neurodegenerative Diseases, Including Parkinson’s

Title: Selective Melanotropin Ligands for Neurodegenerative Diseases, including Parkinson’s

Invention: This invention involves administering selective melanotropin receptor ligands to central nervous system diseases, including Parkinson’s Disease.

Background: Parkinson’s disease reduces the amount of dopamine produced by the neurons, limiting actions and movements. Melanocyte-stimulating hormones (MSH) have been proven to provide protection for the brain, allowing for the protection and recovery of neurons. MSH are theorized to be able to produce neuromelanin but the MSH have no selectivity toward the melanocortin receptors. Currently there is a need for a selective melanocortin receptor ligands. This invention allows for melanotropin to be administered through either one or both the melanocortin 3 receptor (MC3R) and melanocortin 4 receptor (MC4R).

Applications:
- Neurodegenerative treatment/prevention
- Pharmaceutical formulation

Advantages:
- Stimulates neuromelanin production
- Anti-inflammation function
- Anti-microbial agents

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