

Novel Biomarker for Alzheimer's Disease



DESCRIPTION

Alzheimer's disease is the most common cause of dementia and affects roughly 4 million individuals in the United States. It is characterized by the presence of plaques formed from beta amyloid protein and neurofibrillary tangles. There have been a number of studies showing that neurofibrillary tangles correlate more accurately with Alzheimer's disease than the plaques. Until now primary criticism of this theory is the absence of defined variants of kinases or phosphatases associated with Alzheimer's disease that would be necessary for the creation of the neurofibrillary tangles. One such newly discovered variant is acid phosphatase, a product of the ACP 1 gene, which is a ubiquitously expressed low molecular weight tyrosine phosphatase. A common variant, termed ACP 1*A, is associated with lower acid phosphatase. This technology covers using the ACP1*A polymorphism as an effective biomarker for early onset Alzheimer's disease.

KEY ASPECTS

- Biomarker can be identified in a nucleic acid assay
- Excellent biomarker for susceptibility to early onset Alzheimer's disease prior to cognitive impairment

INTELLECTUAL PROPERTY

Title	US Patent Number	Issued
Association Between The Acid Phosphatase (ACP1) Gene and Alzheimer's Disease	6,869,768	3/22/2005

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