# METHOD AND KIT FOR THE DIAGNOSIS OF ALZHEIMER´S DISEASE BASED ON THE DETECTION OF APOLIPOPROTEIN E

## Technology description

This system is an invitro method for diagnosing Alzheimer´s Disease that consists in the determination of ApoE-based biomarkers specifically: the presence, quantity or concentration of 34 kDa apoE (inmature glycoform) in apoE aggregates 100 kDa in size (wich also reflect abnormal aggregates/dimers identified only in AD patients); apoE dimer/monomer ratio detected in a native electrophoresis assay; and the presence of apoE dimers detected in a native electrophoresis assay. This Alzheimer´s Disease diagnostic kit includes the reagents necessary to carry out the method.

## Technical advantages and business benefits

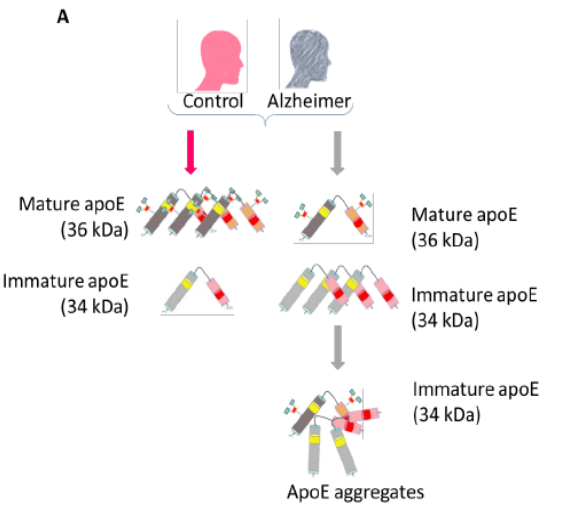
In the current state of affairs, various methods have been described to determine the type of APOE variant, as well as methods for sub-grouping patients with Alzheimer´s Disease by APOE genotype to estimate other biomarkers. However, no diagnostic methods or kits have yet been described for this disease based on alterations of the apoE protein itself associated with the development of Alzheimer´s Disease.

The invention presented here provides an in vitro method and kit for diagnosing Alzheimer´s Disease, providing a solution to the technical problem started.

## Stage of Development:

Demonstrated in brain extracts from Alzheimer's Disease patients, and in the cerebrospinal fluid (CSF).

**Scheme illustrating the imbalance between immature and mature forms, and aberrant complexes, of apoE between Alzheimer's Disease patients (AD) and controls.**




ApoE aberrant complexes, enriched in immature species, as Alzheimer's disease biomarkers

## Intellectual Property:

- Priority European patent application filed (March 17, 2022)
- National phase: Europe (EP 4495599 A1) and USA (US 2025/0012816 A1).

## Aims

Looking for a partner interested in a license and/or a collaboration agreement to develop and exploit this asset.

## Contact details

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