DIAGNOSIS OF AMYLOIDOSIS

Protein extraction method for diagnostics

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What's needed for?

This patent defines a new method for the extraction and identification of proteins starting from a small quantity of biological material. The first diagnostic application that is currently at an advanced stage of development and validation is in the diagnosis of amyloidosis.

Currently, the isolation of amyloid fibrils requires a complicated protocol and a significant quantity of biological material. This patented micro-extraction technique can create a protein extract ready for chemical analysis, without changing its buffer, starting from different kinds of tissue, in small quantity. A quality protein extract can be obtained starting from materials stored in different buffers. The sample does not need to be stored at controlled temperature. The patented technique can thus extract amyloid fibres in an effective and precise manner, using less biological material than current methods. In the future this invention will be useful for diagnostics and research where it is important to characterize the proteins present in tissue, without altering their structure.

Advantages

- Reduces time for analysis
- Protein extraction from minimal biological tissue
- No need to refrigerate sample
- No need to change its buffer during analysis

Applications

- Diagnosis of amyloidosis
- Analysis of protein in biological tissue

TRL scale

1 2 3 4 5 6 7 8 9

Health and biomedical - Medical Devices