DIAGNOSIS OF AMYLOIDOSIS

Protein extraction method for diagnostics

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What we are looking for

We are looking for a suitable partner to enter into license deal/co-development partnership

What it is needed for?

Accurate diagnosis and typing of Amyloidosis, a group of diseases where the abnormal protein, called amyloid, builds-up in the organs and interferes with their normal function, is of paramount importance in order to determine the appropriate therapeutic intervention.

Current methods for diagnosis of amyloidosis are lengthy, labor and cost intense, lack precision leading to both, false positives and false negatives. Additionally, significant quantity of biological material is required. Thus, there is a need for a simple diagnostic test, that would allow for quicker and more precise diagnosis of amyloidosis.

We have developed a method for diagnosis and chemical typing of amyloidosis. The invention consists of lysis buffer and procedure for protein extraction, followed by SDS-PAGE and immunoblot analysis. This micro-extraction method was validated for cardiac amyloidosis but can also be applied to different proteins and tissues.

Advantages

- Quick preparation of quality protein extract and reduced time of analysis; thus, short time to diagnosis;
- Does not require highly trained personnel and expensive equipment;
- Cost effective;
- Minimal quantities of biological tissue are needed for protein extraction;
- Procedure is compatible with different biological tissue storage even FFPE tissues.

Applications

- A diagnostic kit for quicker and more precise diagnosis of amyloidosis.
- A kit for protein extraction form biological samples without altering their structure.

TRL scale

Health and biomedical - Diagnostics