

Ensuring High Quality DNA and RNA isolation from the Brains for Dementia Research (BDR) Resource using the Agilent 2200 TapeStation Nucleic Acid System.

<https://neurodegenerationresearch.eu/survey/ensuring-high-quality-dna-and-rna-isolation-from-the-brains-for-dementia-research-bdr-resource-using-the-agilent-2200-tapestation-nucleic-acid-system/>

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Country

United Kingdom

Title of project or programme

Ensuring High Quality DNA and RNA isolation from the Brains for Dementia Research (BDR) Resource using the Agilent 2200 TapeStation Nucleic Acid System.

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Alzheimer's Research UK

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€ 27,059

Start date of award

01/08/2015

Total duration of award in years

1

Keywords

Research Abstract

DNA quality is extremely important for genetic analysis and can determine the success of a study. Accurate quantification and measurement of DNA integrity following extraction allows the decision as to whether a sample can be included for certain genetic studies preventing a high

failure rate at data quality control, and therefore help alleviate reducing the power of the dataset at the analysis stage. The purchase of the Agilent 2200 TapeStation Nucleic Acid System allows for efficient and rapid determination of sample quality at the point of extraction; therefore eliminating downstream problems arising from poor sample quality. The DNA Integrity Number (DIN) generated, allows the accurate cut-off between high and low sample quality; whereas with current methods (visualisation on agarose gels) the cut-off is subjective, cumbersome and takes longer. Over the next five years we will be extracting DNA from 2000 BDR samples in preparation for sequencing; this requires the highest quality DNA possible to ensure success and maximise cost effectiveness. With the Agilent 2200 TapeStation providing DINs only samples that are guaranteed to yield high quality results will be included into the genetic analysis phase thereby ensuring the highest quality data output pertinent to the development of Alzheimer's disease.

Further information available at:

Types:

Investments < €500k

Member States:

United Kingdom

Diseases:

N/A

Years:

2016

Database Categories:

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