OptoPath

NEUROCENTRE MAGENDIE

THERAPMEM-2

Evaluation of the cognitive enhancer property of new compounds on long-term spatial memory in old rodents

Background

Aging is associated with a decline in cognitive function and the ability of a given compound to be a cognitive enhancer can be assessed in the water maze.

Assay principle

Animals are tested for their abilities to navigate through space. Analysis of the performances across days allows concluding on the property of a compound on long-term memory whereas the analysis of the performances within sessions give information on the efficacy of the compound on working memory. Given the existence of individual differences in cognitive aging, old groups are divided into two subgroups: aged unimpaired (AU) and aged impaired (AI) rats. According of the design of the experiment, the AU can be used as a control group. It can be also used to verify that the compound does not have deleterious effects.

Assay Information

Biological models	**Male old adult rats (18-24 month-old**
Methods	**Water maze**
Readouts	• **Ability to learn** • **Ability to remember**
Standard reference	**Depending on the pharmacological features of the tested compound**

Person in charge

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INVESTISSEMENTS D'AVENIR

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