Nov 23, 2023

Passive avoidance (step-down test)

Nature Communications

In 3 collections

DOI
https://dx.doi.org/10.17504/protocols.io.5jyl8pkb9g2w/v1

Marina Lorente Picón[1], Núria Peñuelas[1], Ariadna Laguna[1], Miquel Vila[1]

[1]Vall d'Hebron Research Institute

Vilalab Public | Nuria

Miquel Vila
VHIR-CIBERNED-ASAP

DOI: https://dx.doi.org/10.17504/protocols.io.5jyl8pkb9g2w/v1

External link: https://doi.org/10.1038/s41467-024-53168-7

Protocol Citation: Marina Lorente Picón, Núria Peñuelas, Ariadna Laguna, Miquel Vila 2023. Passive avoidance (step-down test). **protocols.io** https://dx.doi.org/10.17504/protocols.io.5jyl8pkb9g2w/v1

Manuscript citation:
Laguna, A., Peñuelas, N., Gonzalez-Sepulveda, M. *et al.* Modelling human neuronal catecholaminergic pigmentation in rodents recapitulates age-related neurodegenerative deficits. *Nat Commun* **15**, 8819 (2024). https://doi.org/10.1038/s41467-024-53168-7

Protocol status: Working
We use this protocol and it's working

Created: November 21, 2023

Last Modified: November 23, 2023

Protocol Integer ID: 91252

Keywords: passive avoidance, mice, test

Funders Acknowledgements:
ASAP
Grant ID: ASAP-020505

Abstract

Passive avoidance (step-down test) for mice

1 Prepare the platform: Passive Avoidance - Step Down for Mice (vibrating platform) (#40570, Ugo Basile) consisting of a platform located in a controllable electrified net.

2 Train the animals 24h before the test. Put the animal in the plexiglass platform located in the middle of the electrified net with 0.3 mA. If the mouse steps down the platform, it will receive an electric shock. Stop immediately the electrified net and remove the animal from the cage.

3 Clean the platform each time between animals.

4 After 24 hours, place again the same mice in the same platform. Do not electrify the net. Measure the time that the animal spends on the platform before stepping down.

5 Calculate the time on the platform by subtracting the latency time from the first day to that of the second day to normalize for the inter-individual variability in curiosity/activity of each mouse.