

CENTRAL NERVOUS SYSTEM

Tail Suspension Test

A set of combined symptoms are required to diagnose depression, as irritability, weight changes, guilt feeling, low concentration, sleep problems, etc. In this regard, measures related to resignation (commonly called as learned helplessness) are used as one of the main parameters in the screening depressive tests. In the tail suspension test¹ the rodent is under a stressful and inescapable situation. During the test session, it presents agitation (specific characteristic in the attempt to escape) and immobility behaviors. In this sense, antidepressant compounds are able to reduce the immobility time¹.

Species: *Mus musculus* (Swiss)

Main read-outs: Immobility time.

Number of animals/group: 8-10 animals

Route of administration: upon request

Treatment mode: upon request

Validation Data

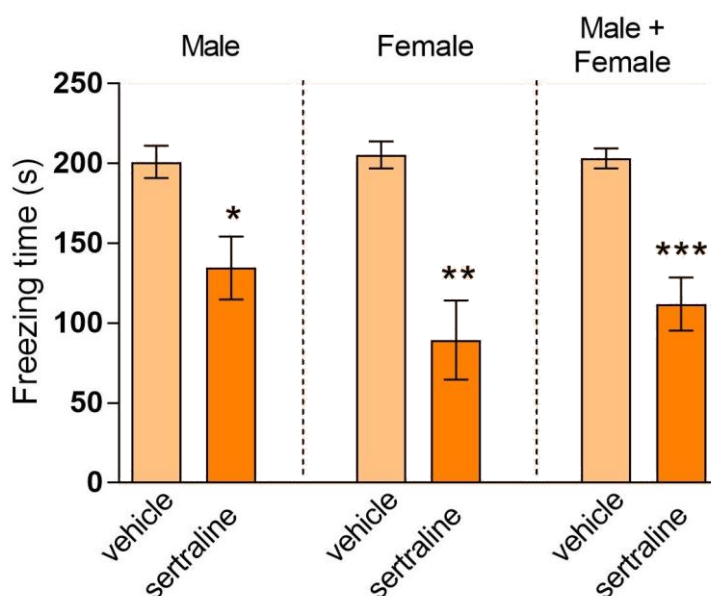


Figure: Effects of sertraline (20 mg/kg, i.p.) in the Tail Suspension Test. Sertraline was used as reference item (positive control). Each column represents the mean ± SEM. Non-paired t-Student test was used for statistical analysis *, P < 0.05, versus vehicle group.

To avoid bias and to allow reproducibility all in vivo experiments follow the ARRIVE guidances². Mouse colony from Charles River Laboratories is bred and maintained in SPF conditions. The project includes study plan and final report. Raw data are inspected by quality assurance unity. The experimental procedures was previously approved by the CIEnP Committee on the Ethical Use of Animals.

References:

- ¹ Steru L, Chermat R, Thierry B, Simon P. The tail suspension test: a new method for screening antidepressants in mice. *Psychopharmacology*, 85: 367-70, 1985.
- ² Kilkenny C, Browne WJ, Cuthill IC, Emerson M, Altman DG. Animal research: reporting in vivo experiments: The ARRIVE guidelines. *PLoS Biol.* 8 (6): e1000412, 2010.