

Sociability Apparatus

3-Chambered Social Test



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Sociability Apparatus

Classic test to assess social behavior and social memory in rodents



Background

Rodent social behavior is a growing-interest field, especially because most of the experiments are normally run in isolated animals, in spite of the fact that **mice and rats are social creatures**.

Rodents show a wide range of social behaviors from maternal care to sexual behavior, attachment, learning, dominance and altruism.

The three-chamber test was first used by J. Crawley in 2004 with the aim of **testing sociability and preference for social novelty**, and therefore social memory.

Today this test is used for studying neuropsychiatric disorders, transgenic models, and pharmacology/toxicology applications.

Product Description

The Ugo Basile Sociability Apparatus comes complete with:

- A grey, metal or IR-transparent removable floor which optimizes video-tracking, thanks to the bottom illumination (LUX 100, not included)
- A three-compartment chamber with removable doors
- Inner and external walls can be transparent or not
- Internal partitions can be easily removed for cleaning (or replaced with transparent ones, if preferred)

- Circular bar grid enclosures for the non-moving animals maximize animal interaction and have different heights and cone-shapes to avoid animal climbing on the enclosure top

Additional information:

- Special cages for cabled animals are available
- Different colours are available and different models for rats or mice
- The system can be completed with video-tracking software, IR-sensitive camera, vari-focal lens objective and ceiling mount
- Multiple cages can be tracked simultaneously

Application

The **initial application of the three-chamber sociability test, J. Crawley was for autism**, by comparing the amount of interaction between a novel and a stranger subject.

Additional applications include **sociability differences between genders, strains and any other variable**, which may end up with a social preference or different social memory.

Beyond autism, the Sociability test has shown significant translational power also in **schizophrenia**, where socially disrupted

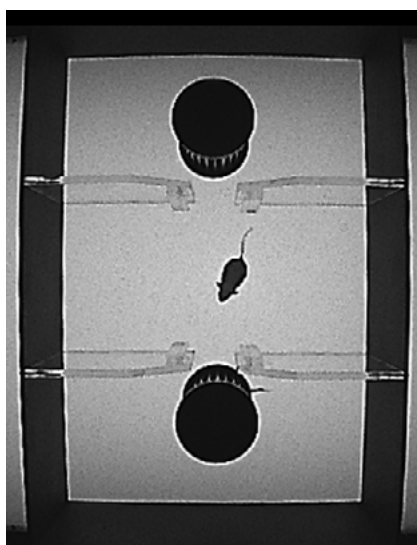
models were performing a worse social novelty inclination.

Procedure-wise, after a period of habituation the subject sociability is determined by measuring the time spent by the freely-moving subject in the proximity of the grid enclosures containing the first unfamiliar (stranger) mouse or rat.

A second stranger is then introduced in the box within its enclosure and the preference for the new mouse/rat can be easily assessed.



Top-down view of Sociability Apparatus.



Top-down view of a Sociability Apparatus with IR-transparent floor used with an IR-sensitive camera for video-tracking software.



Grid cages for sociability, with cone lids



Close-up of internal partitions removal

Features	Benefits
Grey floor	Gives high contrast with both light and dark animals
Metal bottom with special coating	Gives a slightly rough surface, pleasant for the animals to walk on, and it's easy to clean, minimizing reflection
Grid enclosures	Maximize animal interaction and are available in different sizes/colors
USB and LAN data saving	Easy export into excel and data security
Designed for Videotracking	Works even with the most basic video-tracking software
Transparent or opaque walls and partitions	Choose the best option for your experimental needs!
For Mice or Rats	3 different sizes available
Completely open doors available with round- shaped edges	This allows for utilization of cabled animals that can pass through the doors
IR-versions available	For those that prefer back-lit illuminated systems for easy set-up of ambient light and best contrast

References

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Specifications - Physical

Animal	Mouse Cage	Rat Cage	Rat Cage XL
Dimensions	62 x 40 x 25(h) cm	120 x 40 x 40(h)cm	120 x 80x40(h)cm
Cages internal diameter	7 cm	15 cm	15 cm
Cages height	15 cm	25 cm	25 cm

Ordering informations

46502	Rat Cage for 3-chamber Sociability Test, with transparent walls, partitions, and lids. 120x40x40(h)cm, with 2 grid cages (grey, I.D. 15 cm, height 25 cm)
46502-IR-D03	Rat Cage for 3-chamber Sociability test, with IR floor and transparent walls, partitions and lids. For thetered animals. Dimensions: 1200x400x400(h) mm, with 2 grid cages (grey, I.D. 150 mm, height 250 mm). IR illuminator available on request.
46512	Rat Cage for 3-chamber Sociability Test XL, with transparent walls, partitions, and lids. 120x80x40(h)cm, with 2 grid cages (grey, I.D. 15 cm, height 25 cm)
46552	Rat Cage for 3-chamber Sociability Test, with opaque walls and partitions, and transparent lids. 120x40x40(h)cm, with 2 grid cages (grey, I.D. 15 cm, height 25 cm)
46562	Rat Cage for 3-chamber Sociability Test XL, with opaque walls and partitions, and transparent lids. 120x80x40(h)cm, with 2 grid cages (grey, I.D. 15 cm, height 25 cm)
46503	Mouse Cage for 3-chamber Sociability Test, with transparent walls, partitions and lids, 60x40x22(h)cm, with 2 grid cages (grey, I.D. 7cm, height 15cm) with cone-shaped lid
46503-IR-D03	Mouse Cage for 3-chamber Sociability test, with IR floor and visible walls, partitions and cone-shaped lid. For thetered animals. Dimensions: 600x400x220 mm, with 2 stranger animal cages (white, I.D. 70 mm, height 150 mm). IR illuminator available on request.
46513	Mouse Cage for 3-chamber Sociability Test, with transparent walls, partitions and lids. 60x40x22(h)cm, with 2 grid cages (white, I.D. 7cm, height 15cm) with cone-shaped lid
46553	Mouse Cage for 3-chamber Sociability Test, with grey opaque walls and internal partitions (no lids). 60x40x22(h)cm, with 2 grid cages (grey, I.D. 7cm, height 15cm)
46553-D03	Mouse Cage for 3-chamber Sociability Test, with grey opaque walls and internal partitions, transparent lids. 60x40x22(h)cm, with 2 grid cages (grey, I.D. 7cm, height 15cm), for tethred animals.
46533	Mouse Cage for 3-chamber Sociability Test, with grey opaque walls and transparent internal partitions (transparent lids included). 60x40x22(h)cm, with 2 grid cages (grey, I.D. 7cm, height 15cm) with cone-shaped lid
46533-IR-D03	Mouse Cage for 3-chamber Sociability test, with black IR-transparent perspex floor, opaque external walls and transparent internal walls, partitions and lids. For thetered animals. Internal dimensions: 600x400x220 mm, with 2 stranger grid cages (grey, I.D. 70 mm, height 150 mm).

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