



STANDARD OPERATING PROCEDURE

Updated: 01-02-2022 Valid upto 01-08-2022

Y-MAZE

FUNCTION: To study the anti-anxiety effect in zebrafish model

Standard Operating Procedure

1. The apparatus consists of a Y-maze glass aquarium with three (25cm long start arm, in which fish start to explore (always open), the novel arm, which is blocked during the first trial, but open during the second trial, and the other arm (always open)).

The centre of the maze (neutral zone) is not computed in the analysis.

2. The Y-maze task consists of two trials separated by a TTI (training test interval) to assess response to novelty (fish placed in the apparatus when the novel arm is unblocked by a pulley and string system) and spatial recognition memory (1hr, 3hr and 6hr TTI).

3. During the first trial (training, 5 min), fish is allowed to explore only two arms (start and other arm), with the third arm (novel arm) closed.

4. For the second trial (after different TTIs), the fish is placed back in the same starting arm, with free access to all three arms for 5 min. The time spent in each arm, the number of entries to new arm and total distance travelled is evaluated in the test to assess short arm spatial memory.

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