

Vertical Screen Test
IACUC Standard Procedure
Effective Date: June 2024

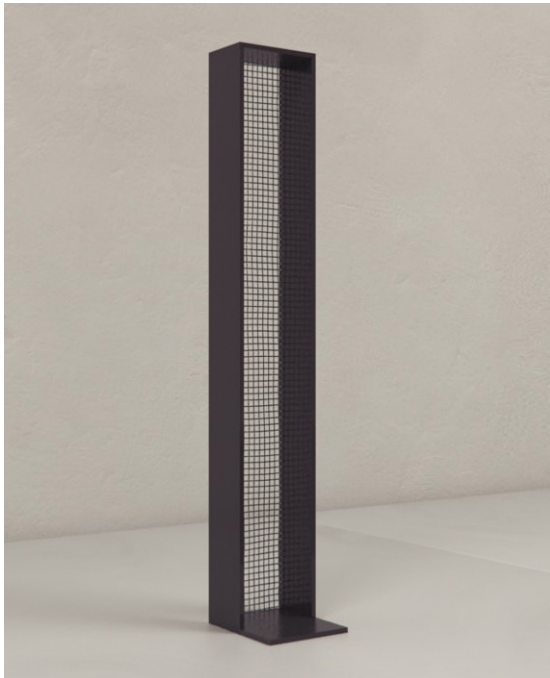
Description of Procedure:

The vertical screen test measures the climbing response of a mouse or rat.

Supplies:

The apparatus is a vertically positioned grid box mounted with plexiglass, and this allows the mouse to grab on the grids as it climbs down. The back side of the vertically standing box is made of a wire mesh, the front side is open, and the other four sides are made of plexiglass. For stability, the bottom of the apparatus has an extension to the front. For mouse: approximately 8 cm x 55 cm x 5 cm, with 1 mm diameter wire, 0.8cm x 0.8cm mesh.

For rat: approximately 12 cm x 85 cm x 8 cm, with 1 mm diameter wire, 1 cm x 1 cm mesh.



Procedure Steps:

1. Place animal at one end of the wire mesh screen.
2. Slowly rotate screen to a vertical position.
3. Note whether or not the animal shows a climbing response.

References:

Tillerson, Detection of Behavioral Impairments Correlated to Neurochemical Deficits in Mice Treated with Moderate Doses of 1-Methyl-4-phenyl-1,2,3,6-tetrahydropyridine, *Experimental Neurology*, 2002

Kim ST, Son HJ, Choi JH, Ji IJ, Hwang O. Vertical grid test and modified horizontal grid test are sensitive methods for evaluating motor dysfunctions in the MPTP mouse model of Parkinson's disease. *Brain Res.* 2010