

A COMPLETE TOOLKIT FOR PAW WITHDRAWAL TESTING



BIO-VF-T: Von Frey Kit

INSTRUMENT OVERVIEW

All you need to begin your experiment in one advantageous kit: whether you want to start research in allodynia, hyper-sensitivity or pain assessment, the Von Frey Filament evoked nociception test is a well established basic experiment .

To help you **start your measurements as fast and easy as possible**, we provide a **complete package** including all the necessary equipment to perform the Von Frey test.

This kit includes a full set of 20 Filaments, the elevated stand with a mesh grid and 2 cages for isolating the animals.

DOMAINS OF APPLICATION

- Phenotyping
- Neuropathy
- Inflammation
- Arthrosis
- Post-Operative Pain

HOW DOES IT WORK?

When the tip of a fiber of given length and diameter is pressed against the skin at right angles, **the force of application increases as long as the researcher continues to advance the probe**, until the fiber bends.

After the fiber bends, continued advance creates more bend, but not more force of application. This principle makes it **possible for the researcher using a hand held probe to apply a reproducible force**, within a wide tolerance, to the skin surface.

Rodents exhibit a paw withdrawal reflex when the paw is unexpectedly touched. The Touch Test™ Sensory Evaluator can be used on the Plantar surfaces of the foot of a rat or mouse, and the animal will indicate sensation by pulling back its paw. Replacement filaments available.

KEY FEATURES

- Complete kit: all you need to start the experiment
- Full set of 20 Von Frey Filaments for every testing need
- Robust and Modular isolation cages
- Grid made of stainless steel for durability

TECHNICAL SPECIFICATIONS

	Modular cages (BIO-PVF)	Elevated stand + Mesh (BIO-STD-EVF)
Animals	2 rats or 6 mice per cage	Holds max. 3 Bioseb Modular Isolation Cages
Material	3 mm thick PVC (Grey and transparent)	Black PVC and stainless steel
Washable	Yes	Yes
Sterilization	YES (chemical, no autoclave)	YES (chemical, no autoclave)
Dimensions (L x w x h)	230 x 242 x 146 mm	150 x 50 x 30 mm

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VON FREY KIT IN DETAILS

The kit includes **20 monofilaments** based on the Semmes Weinstein set. This set provides an approximately logarithmic scale of actual force, and a linear scale of perceived intensity. The filaments are retractable and delivered in a convenient leatherette case for easy transport and storage.

Von Frey Filaments full lineup:

Size	1,65	2,36	2,44	2,83	3,22	3,61	3,84	4,08	4,17	4,31	4,56	4,74	4,93	5,07	5,18	5,46	5,88	6,1	6,45	6,65
Force (g)	0,008	0,02	0,04	0,07	0,16	0,4	0,6	1	1,4	2	4	6	8	10	15	26	60	100	180	300

The filaments are accompanied by an **elevated stand** topped by a mesh grid. With height options of 30 cm or 45 cm and a large **grid in stainless steel**, this stand is a perfect tool to facilitate access to the subject plantar surface.

Two modular isolation cages complete the kit. Each cage features opaque side walls eliminating the ability for the subjects to view one another, with transparent front and top panels for operator observation of each compartment. The individual compartments are ideally sized to minimize activity but not induce stress. The design offers a solid, practical and user-friendly solution to acclimate **up to 6 mouse or 2 rats per cage** !



Bioseb's Von Frey Filament Stand & Modular cages

HIGHLIGHTED BIBLIOGRAPHY Exhaustive list on our website



Selective inhibition of soluble TNF using XPro1595 relieves pain and attenuates cerulein-induced pathology in mice, *BMC Gastroenterology* (2021), R. Randhi et al, DOI: 10.1186/s12876-021-01827-0

Alternate thermal stimulation ameliorates thermal sensitivity and modulates calbindin-D 28K expression in lamina I and II and dorsal root ganglia in a mouse spinal cord contusion injury model, *FASEB J* (2021), X. Cheng et al., DOI: 10.1096/fj.202001775R

Impairment in locomotor activity as an objective measure of pain and analgesia in a rat model of osteoarthritis, *Exp Ther Med* (2020), M. Alsalem et al., DOI: 10.3892/etm.2020.9294

Curcumin-cyclodextrin/cellulose nanocrystals improve the phenotype of Charcot-Marie-Tooth-1A transgenic rats through the reduction of oxidative stress, *Free Radic Biol Med.* (2020), M. Caillaud et al., DOI: 10.1016/j.freeradbiomed.2020.09.019

D2 receptor activation relieves pain hypersensitivity by inhibiting superficial dorsal horn neurons in parkinsonian mice, *Acta Pharmacol Sin* (2021), DL. Tang et al., DOI: 10.1038/s41401-020-0433-3.

ORDERING INFORMATION

Reference	Description
BIO-VF-T	Von Frey full kit : 1 set of 20 Filaments + 2 modular PVF cages + 1 complete stand with mesh grid
BIO-VF-M	Set of 20 Von frey filaments
BIO-VF-FIL	Set of 5 packed VF filaments of your choice
BIO-PVF	1 modular cage for 2 rats or 6 mice
BIO-STD-EVF	Elevated stand, 30 cm legs
BIO-STD-EVF-XL	Elevated stand, 45 cm legs

FOR MORE INFORMATION, VISIT OUR WEBSITE: WWW.BIOSEB.COM/EVF

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