ANALGESY-METER

Randall-Selitto Paw Pressure Test

ugobasile.com

ugo basile®

YOUR COMPANION IN DISCOVERY SINCE 1963

ANALGESY-METER

Rapid and precise screening of analgesic drugs for anti-nociceptive studies, in healthy or inflamed limbs.

Background

Current model based on over 50 years of expertise and continuous product development.

Assesses the force at which the animal feels pain.

Typically, the Randall-Selitto method is used as a rapid and sensitive screening of analgesic and anti-inflammatory drugs.

Rat/mouse and mouse models available with 3 different force ranges.

More than 1000 published papers citing Ugo Basile.

Typical device applications

The Ugo Basile Analgesy-Meter has been designed to perform rapid and precise screening of analgesic drugs for anti-nociceptive studies, in healthy or inflamed limbs.

The instrument exerts an increasing force at a constant rate. This force is continuously monitored by a pointer moving along a linear scale or recorded on the digital interface upon model.

The force is applied to the animal's paw, which is placed on a small plinth under a cone-shaped pusher with a rounded tip.

The plinth is made of Teflon, which is biologically inert and has a very low friction coefficient. Thus, if the animal suddenly withdraws its paw, it slips out easily without being injured.

The operator depresses a pedal-switch to start the mechanism. When the animal reacts, it is free to leave the paw without any researcher action.

When the rat struggles, the operator releases the pedal and reads off the scale the force at which the animal felt pain.

Product Description

The PAM is designed to measure the force applied to a rat or mouse paw according to the Randall-Selitto paw pressure test. It is available in two models:

- The 37215 rat/mouse model features 3 force ranges from 0 to 250, 500, 750g.
- The 37216 mouse model features 3 force ranges from 0 to 125, 250, 375grams. Also includes a special chisel-shaped pusher (force applicator).

An optional digital module, including a force transducer and digital display, is available for users who require electronic readout.

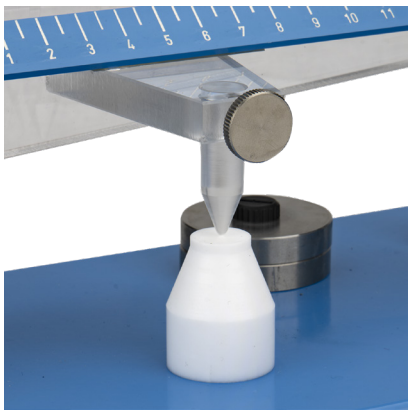
The device is ready to use out of the box and requires no calibration, making setup quick and easy. A hands-free foot pedal is included, allowing the operator to start and stop the force application while keeping their hands free to handle the animal.

To ensure animal safety, the PAM uses a low-friction Teflon plinth, allowing the paw to slide off easily once the withdrawal threshold is reached, minimizing the risk of injury.

A low-voltage synchronous motor provides precise, low-speed force application for optimal control during testing.

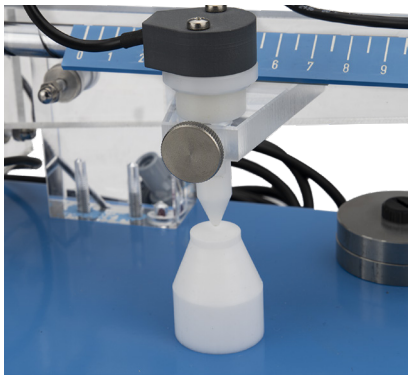
Additionally, an upgrade kit is available for some older Ugo Basile Analgesy-Meter models.

Analgesy-Meter, Randall-Selitto paw-pressure test



Close up of teflon low-friction Teflon plinth.

Bundle Analgesy-Meter, Randall-Selitto paw-pressure test with Analgesy-Meter DAQ



Close up of teflon low-friction Teflon plinth, with force transducer, included optional digital module for users who require electronic readout

Features	Benefits
Same instrument, three different force ranges	Applied force: - 37215 from 0 to 250, 500, 750grams (with extra weights) - 37216 from 0 to 125, 250, 375grams (with extra weights)
No calibration needed	Simple and reliable
Classic method since the 1960s	More than 1000 papers published!
Model with digital reading	Upgrade kit for old UB Analgesy-Meters available

Main references

- Avagliano, C. et al. (2025), "Sodium Butyrat* ameliorates pain and mood disorders in a mouse model of Parkinson disease", Biomedicine & Pharmacotherapy
- Chen, G., et al. (2024), "SETD2 deficiency in peripheral sensory neurons induces allodynia by promoting NMDA receptor expression through NFAT5 in rodent models", International Journal of Biological Macromolecules
- Hiroki, T., et al. (2022) "Spinal γ-Aminobutyric Acid Interneuron Plasticity Is Involved in the Reduced Analgesic Effects of M*rphine on Neuropathic Pain", The Journal of Pain
- Araldi, D., et al. (2022) "Contribution of G-Protein α-Subunits to Analgesia, Hyperalgesia, and Hyperalgesic Priming Induced by Subanalgesic and Analgesic Doses of Fentan*l and M*rphine", Journal of Neuroscience
- Binda, K.H. et al., (2021) "Exercise protects synaptic density in a rat model of Parkinson's disease", Experimental Neurology
- L.O. Randall and J.J. Selitto: "A Method for Measurement of Analgesic Activity on Inflamed Tissue" Arch. Int. Pharmacodyn. CXI, No. 4: 409-419, 1957

Specifications - Operation

Start/Stop	By Pedal Switch
37215 Force Range	From 0 to 250, 500, 750 grams
37216 Force Range	From 0 to 125, 250, 375 grams
Force increasing rate	Regulated by the Analgesy-Meter configuration
Digital Data Recording	Via optional Analgesy-Meter DAQ 37215-100
Power Requirement	115V 50/60Hz 230V 50/60Hz

Physical

Dimensions	46(w)x16(d)x14(h) cm

Ordering informations

37215	Analgesy-Meter, provided with start-stop foto-electric switch, complete
37215 BUNDLE	Bundle including Analgesy-Meter 37215 and Upgrade Kit 37215-100
37216	Analgesy-Meter, provided with start-stop foto-electric switch, complete, model for mice
37215 BUNDLE	Bundle including Analgesy-Meter 37216 and Upgrade Kit 37215-100, model for mice

Optional Items

37215-327	Mouse Kit, to transform the analgesymeter for rats into the analgesymeter for mice (including specific slide, 2 additional weights (50%) and 37215-326 pusher
37215-100	Analgesy-Meter DAQ Upgrade Kit

Extra warranty (standard 12 months + 12 months with product registration) available

Related Products

PAM (for joint pain)
Product Code: 38500/38550

Dynamic Plantar Aesthesiometer
Product Code: 37550

Electronic Von Frey
Product Code: 38450

Von Frey Hairs
Product Code: 37450-275

ugobasile.com

more than 40,000 citations in the main bibliographic search engines.

Rev2 June 2025

Ugo Basile SRL
Via Giuseppe Di Vittorio, 2
21036 Gemonio (VA) ITALY
Tel. +39 0332 744574
Get a quote: sales@ugobasile.com

Partner area