

Innovative Lab Products for the Life Sciences

The Bullet Blender™ *The easiest and quickest way to lyse cells and tissue*

Manufactured by NAI, Distributed by WISBiomed

Cat: NA-01 with sample beads, user guide

Fax Purchase Order to 650-242-8368



Disrupt / Lyse 24 samples at a time!

The Bullet Blender™ enables you to disrupt, lyse, or homogenize up to 24 tissue/cell samples at a time. Load the samples in standard microcentrifuge tubes into the Bullet Blender™. The "bullets" in the "blender" vigorously strike all the sample tubes simultaneously for a few minutes.

- > High Throughput
- > No Cross Contamination
- > Samples stay cool
- > Convenient
- > Risk Free

“It's a very useful device for making tissue lysates. We no longer use sonication for DNA, RNA and protein preparation from multiple tissue samples.”

Prof. Michael Sherman, Boston University School of Medicine

The Bullet Blender™ enables you to disrupt or homogenize up to 24 tissue/cell samples at a time. Load the samples in standard microcentrifuge tubes into the Bullet Blender™. Balls (the "bullets") repeatedly strike the sample tubes in a controlled manner, thousands of times per minutes, inducing vigorous motion of the substances inside the tubes. This provides efficient mixing. The addition of glass beads in the sample tubes allows disruption or thorough homogenization of cells and tissues. Tune the extent of disruption by adjusting the speed, providing efficient mixing.

High Throughput

The Bullet Blender™ prepares up to 24 samples in just minutes.

> No Cross Contamination

The samples are disrupted (or mixed) non-invasively. The sample tubes are kept closed during agitation, as the cells or tissue inside are disrupted. There are no probes to clean between samples.

> Samples stay cool

The instrument uses very little power due to the unique, patented design. It uses a small DC motor to agitate the individual tubes, not ultrasonics. Also, because the motor does not need to agitate any heavy platforms or plates, it is small and will last for years.

> Convenient to Use

Simply place your cells or tissue, and optionally some beads, in standard microcentrifuge tubes, and load the tubes into the Bullet Blender™. Set the duration (1 to 5 minutes) and speed (vigorousness). There are no probes to clean. And it is not loud nor does it heat up!

> Risk Free Purchase

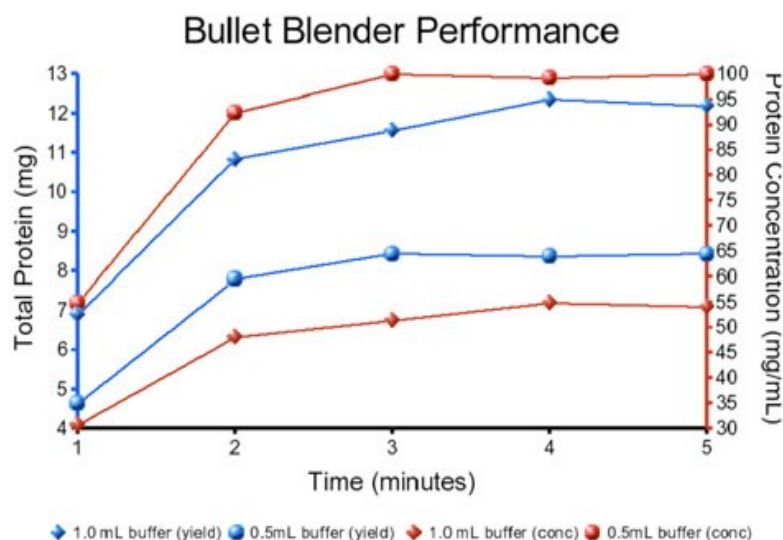
The Bullet Blender™ comes with a 30 day money back guarantee and a 2 year warranty. The simple, reliable design enables the Bullet Blenders™ to sell for one half to one fifth the price of ultrasonic or other agitation based instruments, yet provides an easier, quicker technique.



Two photos of the Bullet Blender™: the cover open (left) and a close up view showing 3 sample tubes in place (right).

FEATURES

- Compact. Only 8 in. (20 cm) wide by 10 in. (25 cm) deep by 7.5 in. (19 cm) high.
- Capacity of 24 of 1.5 ml &/or 2.0 mL polypropylene sample (microcentrifuge) tubes.
- Can use in cold rooms and incubators, 4°C to 60°C. (Avoid condensation.)
- Can use most anywhere. Only requires an electrical outlet.
- CE/UL certified 24 volt power supply for wall outlets worldwide.
- Two adjustable Parameters:
 - duration (1 to 5 minutes) and momentary on (for quick mixing).
 - speed (vortexing to vigorous agitation).
- User friendly, one-touch operation.
- Samples stay cool. The instrument does not heat up.
- Patented technology.
- Built in the USA for years of trouble free use.
- Warranty: 2 years parts and labor. 3 years on motor.
- 30 day money back guarantee.



This graph illustrates a sample application: homogenizing up to 24 samples of chicken muscle in just 3 minutes. Each tube had 0.2 g chicken muscle in polysome lysis buffer (0.5% NP-40, 100mM KCl, 10mM HEPES, 5mM MgCl₂) with 0.2 g of 0.5 mm diameter glass beads. The samples were centrifuged to collect the protein. Note that more protein was recovered using 0.5 mL buffer (in 2.0 mL conical bottom tubes) than with 1.0 mL buffer (in 1.5 mL tubes); other volumes of buffer did not work as well. The amount of protein was determined using a Bradford assay.