



diagenode

Megaruptor[®] 3

Sleek, Innovative, Unmatched
Diagenode Shearing Machine

Dear customer,

Thank you for choosing our device and for your confidence in Diagenode.

We have designed this device using our highest level of knowledge in shearing so that it exceeds your expectations. This device will serve your research needs for many years and will provide the best experience with long DNA molecules preparation.

INTENDED USE

The Megaruptor® 3 is intended for laboratory use. It is not suitable for clinical use. Use of the Megaruptor 3 in any manner other than as directed herein could cause harm to persons and may void the warranty. Diagenode will not be responsible for injury or damage resulting from improper use of the Megaruptor 3.

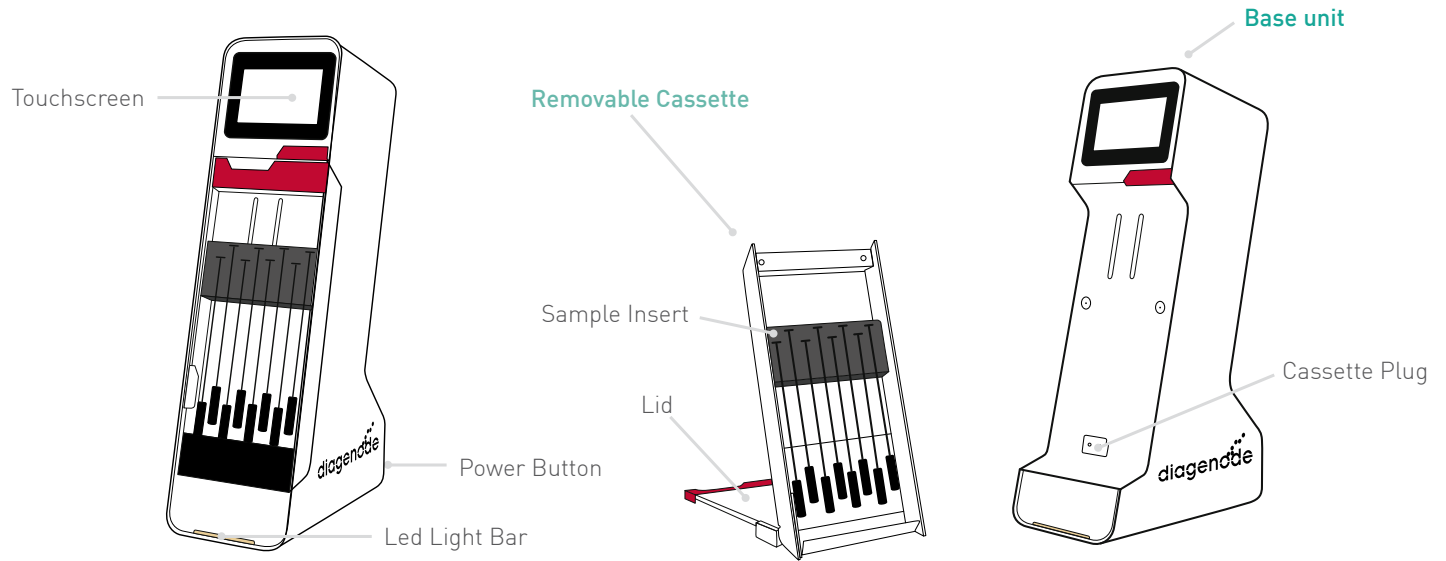
WARNING

Carefully read the following instructions before using your Megaruptor 3 to avoid the risk of personal injury and damage.

- Do not use the Megaruptor 3 for anything other than its intended use.
- After removing the packaging, make sure that the Megaruptor 3 is intact.
- Do not use the Megaruptor 3 in a cold room.
- Do not allow the Megaruptor 3 to be used by untrained individuals.
- Clean the Megaruptor 3 carefully and regularly with soft tissue and water.
- Do not use any accessories not recommended by Diagenode.
- Do not use the Megaruptor 3 if it is showing any sign of breakdown or malfunction.
- Do not attempt to dismantle or repair.

TECHNICAL SPECIFICATIONS

External Power Supply Unit Voltage Range	100V AC – 240V AC 50Hz/60Hz
Electrical Consumption Maximum	90W Max
Main Unit Dimensions	250 (L) x 140 (W) x 470 (H) mm
Total Weight	6 kg with Cassette included (0,8kg)
Fragment Length Range Achievable	5 kb - >100 kb
Sample Volume Range	65-500 μ l
Sample Concentration Range	0-150 ng/ μ l
Throughput	1 to 8 samples in parallel
Time per Run	Variable: depending on sample volume, concentration, and target size
Shearing Consumables	Megaruptor® 3 Shearing Kit (16 samples) - Cat. No. E07010003
User Interface	Touchscreen with Megaruptor® software



DESCRIPTION

INTERFACE



Initialization: Set the system to its "0" position



Protocols: Run a shearing experiment (follow instructions)



Go & Shear: Start a new shearing protocol



User protocols: Record your protocol



Settings: Visualize and change the parameters of the Megaruptor 3



Sound & Screen: Visualize and change the parameters of the sound and the screen



Information: General information about your Megaruptor 3



Advanced Mode: Access for administrators



Modification: Modify the parameters

LED LIGHT BAR

The LED light bar allows the tracking of the processing of your samples.

The **blue light** means the system is waiting for the operator and is flashing if the system needs to be initialized.

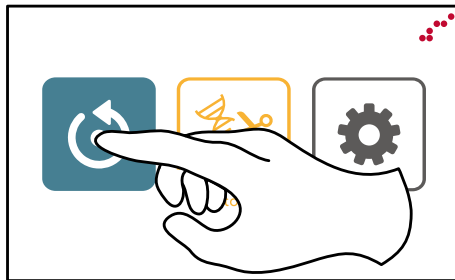
The **green light** indicates the progression of the run.

The **orange light** means the protocol is on pause.

The **red light** indicates an alert message.

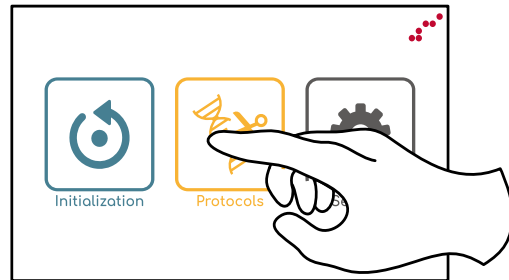
INSTRUCTIONS

1 Start and initialize the device

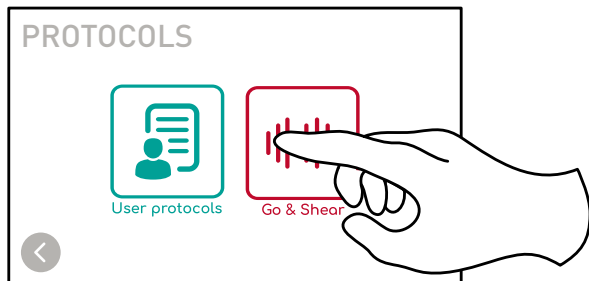



The initialization step must be performed if the icon is flashing

2 Start the shearing experiment



3 Set parameters (concentration, volume, and speed)



Or find your pre-recorded shearing protocol on User protocols 

4 Check the speed recommendations in the manual* according to your protocol (optimized protocols in the table below)



The manual

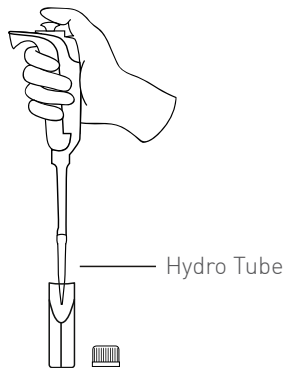
* <https://www.diagenode.com/en/p/megaruptor-3>
Tab Documents

	PROTOCOLS		
	Standard	Low volume	High concentration
Sample Concentration	0-50 ng/μl		51-150 ng/μl
Sample Volume	100-500 μl	65 μl	200-500 μl
Fragment Length Achievable	5-100 kb	12-75 kb	5-100 kb

If the conditions are different from the above table, further optimization steps are needed. Please contact Diagenode <https://www.diagenode.com/en/pages/support>

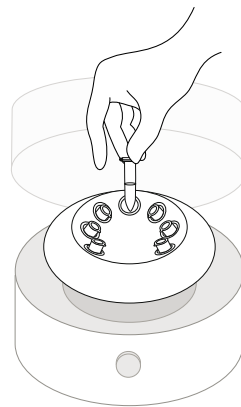
INSTRUCTIONS

5 **Sample** preparation (between 65-500 μl)

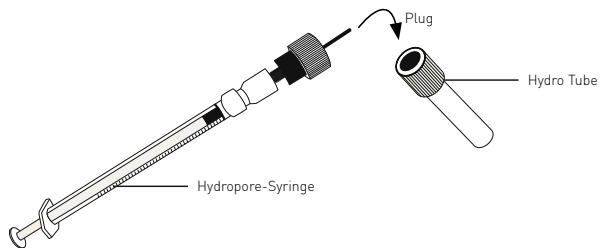


DNA solution in the 0-150 $\text{ng}/\mu\text{l}$ range

6 **Spin** your sample(s)



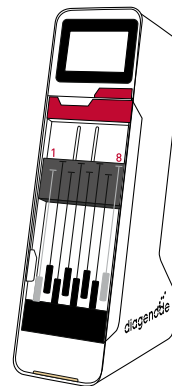
7 Plug your sample(s) to the Hydropore-Syringe



Watch the video on our
Diagenode Youtube channel

How to set up your sample(s)

8 Insert the sample(s) in the cassette (1 to 8 samples)



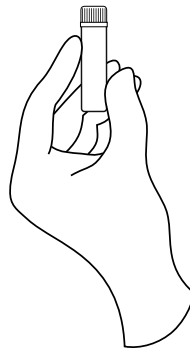
Always set consumables (with sample or empty) at
each extremity of the cassette

INSTRUCTIONS

9 Let your Megaruptor running



10 Collect your sample(s)





If you have any question, please contact the specialist at
<https://www.diagenode.com/en/pages/support>

EQUIPMENT CARE

Regular maintenance steps are typically unnecessary.



Read the full manual

“<https://www.diagenode.com/en/p/megaruptor-3>” - Tab Documents

MANUAL

SAFETY APPROVAL

Megaruptor® 3 has been assessed and **certified under the C€ standards.**

ENVIRONMENTAL PROTECTION

Packaging materials contain recyclable materials.

WARRANTY

Diagenode guarantees all products from any manufacturing defects as we rigorously test all products to meet strict quality standards. Diagenode warrants that all standard components of its instruments will be free of defects in materials and workmanship, unless the original quotation or accompanying documentation states a different warranty period. All warranty periods begin on the date of delivery and apply only to the first purchaser of the product. If a manufacturing defect arises and a valid claim is received within the warranty period, Diagenode, at its discretion, will repair or replace the product in accordance with the warranty terms and conditions stated herein. In case of repair or replacement of a product under warranty, Diagenode will cover the expenses to return the repaired or replacement product.

This warranty covers only manufacturing defects and does not cover any damage caused by misuse, lack of compliance to recommendations stated in the manual, neglect, accidents, abrasion, or exposure to extreme temperatures, chemical solvents, or acids. Improper or incorrectly performed maintenance or repairs will void the warranty.



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