



Helaxy Technical FAQ

For Research Use Only

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Device Capabilities

Frequent Asked Questions

What types of samples can the device process?

Helaxy Eazy - NGS Extraction & Library Device (RUO) can process a wide range of samples including blood, plasma, stool, and FFPE samples.

What is the throughput of the device?

Throughput varies by device model, the current Helaxy Eazy handles low throughput:

- 5 samples + 1 pooling
- 6 samples

What sequencing platforms is the device compatible with?

Helaxy Eazy is compatible with major sequencing platforms such as Illumina's MiSeq, and Thermo Scientific Fisher's Ion Torrent.

Device Capabilities

Frequent Asked Questions

What is the workflow for Helaxy NGS library preparation?

Helaxy Eazy is an automated all-in-one solution from sample extraction to pooled cleaned NGS library.

What types of library prep protocols are available?

Helaxy Eazy currently process amplicon-based applications and offering:

- Generic Amplicon Prep
- In-house HIV-1 NGS Subtype and DRM Genotyping Test
- 16S Metagenomics Amplicon Prep
- Illumina TruSight Tumor 15 Library Prep
- Illumina DNA Prep (Whole Genome Sequencing)

Are there specific kits for different protocols?

Yes, there are specialized kits for each type of protocols.

We offered our in-house kits, optimized for all amplicon-based applications.

Device Capabilities

Frequent Asked Questions

How much starting material is required for Helaxy NGS Library Prep?

The amount of input material required depends on sample type and protocol:

- For plasma, bacteria, stool samples: 200 μL of sample is required
- For FFPE sample: The amount of tissue material varies, but it requires an extracted yield of greater than 0.3 $\text{ng}/\mu\text{L}$ for the TruSight Tumor 15 application.

How is the pooling of libraries done? What is the expected volume after the run?

Pooling of libraries is performed automatically by the device.

The expected volume of the cleaned library that can be retrieved after the run is $> 50 \mu\text{L}$.

How long does the Helaxy library prep process take?

The total processing time takes < 9 hours to complete, resulting in a pooled, cleaned library for a single batch of samples.

Operation and Maintenance

Frequent Asked Questions

How is the device operated?

Helaxy NGS Prep Device comes with proprietary software featuring an intuitive graphical user interface (GUI) for setup, protocol selection, and monitoring with touchscreen interfaces.

What kind of maintenance is required?

Routine maintenance typically includes cleaning, calibration, and software updates. Specific maintenance schedules depend on the device model and usage.

How do I troubleshoot common issues?

Contact us to receive technical support for assistance with issues such as power failure, fluid leaks, or software errors.

Operation and Maintenance

Frequent Asked Questions

What happened if the common issues encountered during the NGS library prep?

- Low yield or concentration of prepared libraries
- Poor library quality (e.g., improper fragment sizes)
- Contamination or degradation of samples
- PCR artifacts or biases

How can these issues be resolved?

- Verify sample quality and concentration before starting
- Optimize fragmentation and PCR conditions
- Use fresh, high-quality reagents
- Ensure proper handling and storage of sample and libraries

If the issues still persist, please contact us to receive support and assistance.

Consumables and Reagents

Frequent Asked Questions

What consumables are required for operation?

Consumables required including Helaxy NGS Prep and Fluidic Clean Up & Size Selection Cards, as well as our in-house reagent kits for sample lysis and library prep.

Are consumables reusable?

No, our cards are single-use to prevent cross-contamination.

Components such as reagent containers and waste bottle may be reusable after proper cleaning and within certain amount of preps.

Which library prep kits are compatible with Helaxy NGS Prep Device.

We are recommended using our in-house kits or amplicon-based library prep kits, however, compatibility depends on the application.

Example of compatible kits include Illumina TruSight Tumor 15 and DNA Prep .

Additional Information

Frequent Asked Questions

Is the device compliant with industry standards and regulations?

Yes, our devices comply with relevant industry standards and regulations, including ISO 13485:2016.

What kind of technical support is available?

Helaxy offers comprehensive support including:

- Email, and online resources (video, application note, data sheets)
- On-site support and training services
- Detailed user manuals and troubleshooting guides

Please visit our website for the more information.

Additional Information

Frequent Asked Questions

Does the device support custom protocols?

Yes, our device offers flexibility for custom protocols and can be tailored to meet specific research needs. Users are highly advised to consult with us before creating and customizing protocols to ensure optimal performance and compatibility with the system.

How does the device handle sample tracking?

Our Helaxy NGS Prep Cards are integrated with sample tracking features such as prefilled indexes, ensuring accurate sample identification and traceability throughout the process.

What is the typical cost per prep for Helaxy NGS library preparation?

The cost per prep for Helaxy Library Prep can vary widely depending on the consumable, kit and reagents used, it ranges from USD 30 per sample.

Additional Information

Frequent Asked Questions

How should NGS library prep kits and reagents be shipped and stored?

All Helaxy kits and reagents will be shipped in room temperature and store at the recommended temperature (-20 °C or 4 °C or room temperature) upon arrival.

What are the storage conditions for prepared libraries?

Prepared libraries should be stored at -20 °C for long-term storage.

Short-term storage at 4 °C is acceptable if libraries will be used within a few days.

How is library quality assessed before sequencing?

Library quality is typically assessed using:

- Bioanalyzer or TapeStation for size distribution
- Qubit or similar fluorometric assays for concentration
- qPCR for quantitative assessment and confirmation of adapter ligation

Additional Information

Frequent Asked Questions

How does the device ensure accuracy and reproducibility?

Helaxy consistently perform quality control checks on the mechanism and reagent dispensing volumes. Additionally, the PCR temperature was calibrated to ensure the device's performance is consistent and reliable.

How scalable is the device for future needs?

Our devices are not designed to be scalable at this time.

However, we are developing additional units to increase throughput as research demands grow.

Stay connected with us for updates on our progress.

Are software and hardware upgrades available?

Helaxy provides regular software updates to enhance performance and add new features.

Hardware upgrades are in developing to expand capabilities and throughput.

Stay tuned for future enhancements.

Thank You

www.helaxy.com