



Custom System Solutions and Work Flows
for Emerging Research Applications

We deliver off the shelf and custom automated frozen aliquotting solutions to the scientific community to preserve sample integrity, increase sample utilization and support major R&D initiatives.

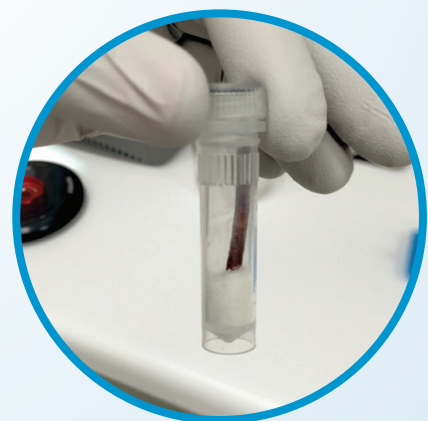


Benefits of Frozen Aliquotting

- Enables access to small frozen samples without the freeze-thaw cycling that can bias data in downstream analyses as samples are kept at -80°C throughout the process
- Generates uniform aliquots that thaw faster than a full sample, improving sample consistency
- Preserves labile molecules within samples, allowing for more accurate data of biomarkers being analyzed
- Preserves parent samples for improved reproducibility and retrospective studies later on
- Avoids manual slicing of frozen tissues; limits handling of feces
- Allows re-access of frozen tissue and fecal samples

Basque Engineering and Science's semi automated platforms enable frozen biospecimen aliquotting from frozen tissue, biofluids and other unique, high-value biospecimens – eliminating their potential degradation due to thawing, maximizing biosample integrity, and optimizing scientific outcomes. Our products support various critical applications in genomics, proteomics, human gut microbiome research, research pathology, analytical chemistry and QA/QC.

The Frozen Sample Aliquotters extracts multiple frozen cores or aliquots from a frozen sample. Parent sample and aliquots are maintained below -80°C throughout the aliquotting process via LN2 chilling, eliminating the freeze/thaw cycle.



Frozen Aliquotting...

Because **THAWING** isn't **COOL**

Bioanalysis

Frozen Aliquotting Preserves Biomolecule Integrity

Frozen aliquotting prevents degradation molecules due to freeze-thaw, improving ADME, Tox and clinical PK results for labile pro-drugs, peptides, and antibody-drug conjugates. Frozen aliquotting enables quantitative analysis of blood samples especially whole blood, which cannot be assayed reliably when thawed.

Microbiome

Frozen Aliquotting of Fecal Samples

Meaningful analysis of the microbiome depends heavily on maintaining the in vivo profile of the microbiome in an ex vivo state. Timely freezing of raw or stabilized fecal samples is the most common method used for preserving sample integrity. Frozen aliquotting reduces processing time and handling of frozen feces by enabling researchers to aliquot and distribute frozen fecal samples in a controlled and efficient manner.

Molecular Pathology

Frozen Aliquotting Enhances Tissue Processing

Using specially designed tissue cassettes that are compatible with cryosectioning, frozen aliquotting is easily integrated into the tissue processing work flow. Laser-targeting and precision probes capture specific sections from fresh frozen or stored tissue samples, eliminating manual slicing and improving consistency.

Biobanking

Frozen Aliquotting Increases Sample Utilization

With frozen aliquotting, users can perform sample QC on a frozen aliquot without compromising the parent sample. Frozen aliquots allow a single parent sample to be distributed to multiple researchers and enable access to rare samples for critical studies.

