

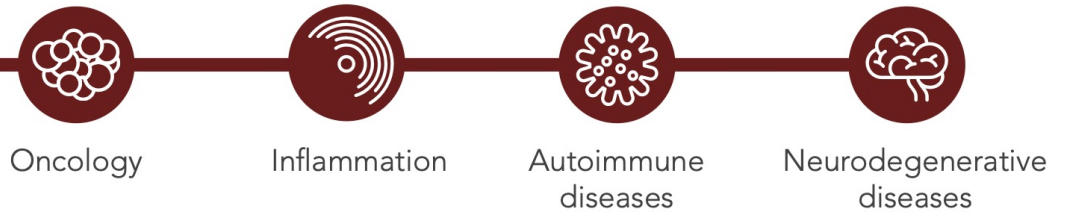
nu·q discover

An innovative solution to profiling nucleosomes.

Empowering drug developers and scientists through a range of state-of-the-art assays for rapid epigenetic profiling in disease, model development, preclinical testing, and clinical studies – from discovery to market ready.



Including research in

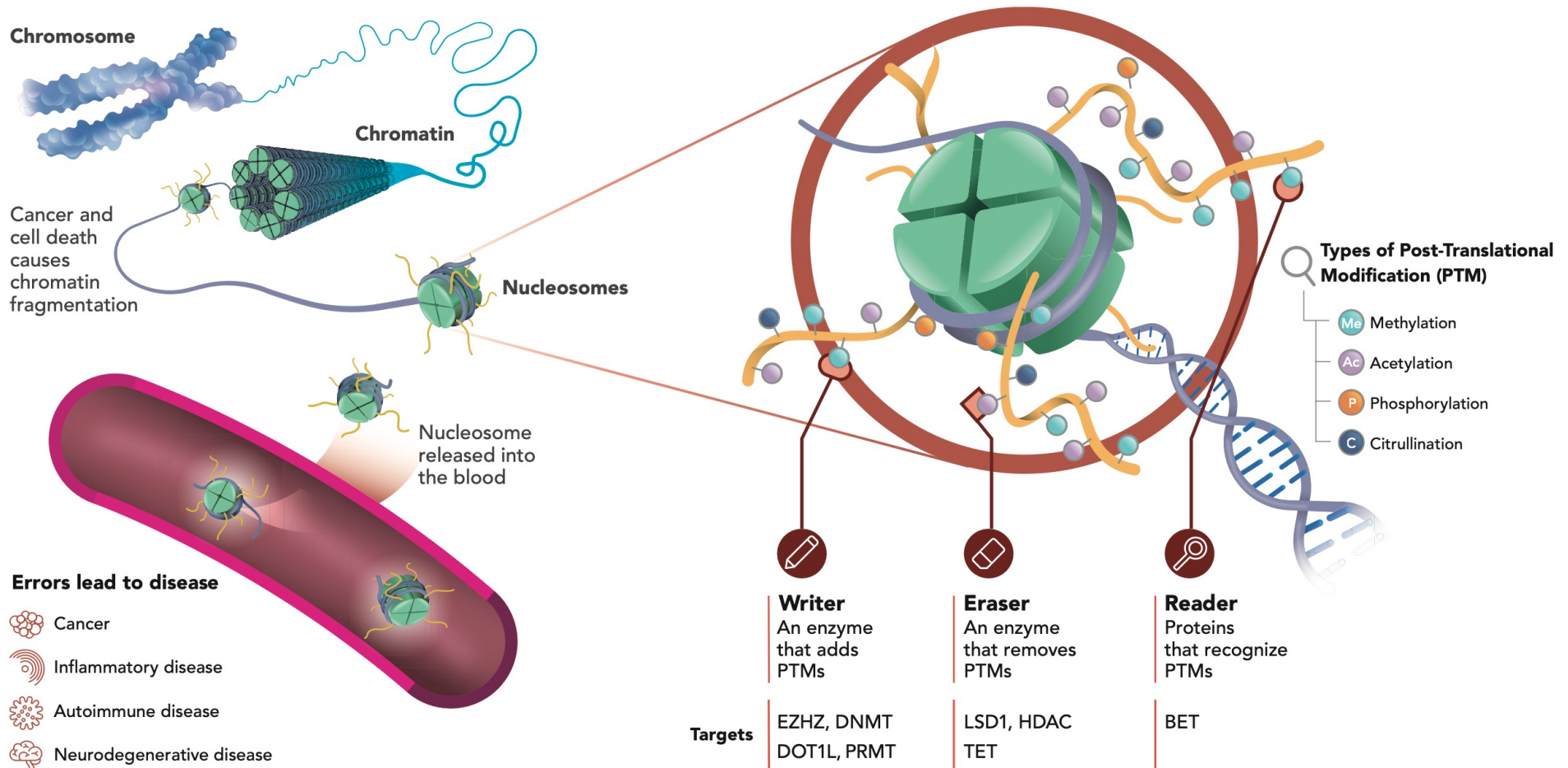


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Volition 

Epigenetic biomarkers: a valuable tool from target identification to validation in clinical studies.

Measuring and monitoring nucleosome levels and modifications in circulating blood has the potential to aid diagnosis, prognosis and monitoring of many human diseases.



Nu.Q[®] adds value across the Drug Development pipeline.

With access to a broad range of state-of-the-art assays built on our proprietary Nucleosomics™ platform, you can answer your drug development, pre-clinical and clinical questions.

Target Identification and Validation

Identify potential drug targets by measuring levels of specific histone modifications

Lead Discovery

Screen and identify lead compounds that modulate the levels of specific histone modifications

Preclinical Studies

Monitor changes in histone modification levels to assess the efficacy and Mechanism of Action (MoA) of compounds

Clinical Studies

Monitor target engagement to determine the pharmacodynamics (PD) of drugs in patients

Regulatory Approvals

Support regulatory submissions and help demonstrate drug safety and efficacy

Identify

- Drug targets/novel inhibitors
- MoA
- Biomarkers

Demonstrate

- PD monitoring of target engagement
- On/Off target activities and effects
- Correlation with gene expression and cancer progression
- Efficacy: in-vitro/in-vivo

Accelerate

- Use same assay for drug screen on cell culture to clinical studies
- Demonstrated in a variety of cells and animal models
- Combine assays for a comprehensive overview

Nu.Q[®] Discover Assays*

Nu.Q [®]	Nu.Q [®] Methylation	Nu.Q [®] Acetylation	Nu.Q [®] – Other PTMs
H3.1	H3K27Me3	H3K18Ac	H3S10Ph
	H3K36Me3	H3K9Ac	pH2AX
	H3K4Me2	H3K27Ac	H3R8Cit
	H3K9Me3		
	H3K9Me1		
	H3K4Me1		
Nu.Q [®] Mutation			
H3K27M			

*For further details of current status and availability, please contact asknu.qdiscover@volition.com

Abbreviations: cf, cell-free, ChLIA, chemiluminescence; CLSI, Clinical and Laboratory Standards Institute; CV, coefficient of variation; EDTA, ethylenediaminetetraacetic acid; PTM, post-translational modifications.

Convenience:

- cf-nucleosome quantification technology run manually and on fully automated magnetic bead-based sandwich immunoassay ChLIA platform.
- No assay development required, assays ready to run.
- Easy to interpret report.
- Assays compatible with multiple animals (murine, lapine, porcine, canine and human) and cell models to provide constancy and confidence in results.

Sensitivity & Specificity:

- Low sample volumes 250µl. Use with EDTA plasma, cell culture extract, supernatant.
- Antibodies screened extensively to ensure antibodies have limited cross reactivity to non-targeted histone PTMs.
- Detection antibodies recognize a nucleosome specific epitope ensuring detection of only intact nucleosomes.
- Typical reproducibility:
 - Precision for Nu.Q[®] H3.1 intra-run less than 5%CV.
 - Precision for Nu.Q[®] H3.1 inter-run less than 10%CV.
- Dynamic range reflects that of clinical samples with the lower limit of quantification: 3ng/ml for Nu.Q[®] H3.1.

Quality:

- Assays developed based on CLSI guidelines to ensure they have high sensitivity and reproducibility.
- Expert support for your histone PTM research needs.



Volition is a multinational epigenetics company, powered by Nu.Q[®], our proprietary nucleosome quantification platform. Our Nu.Q[®] Discover program enables drug developers and scientists access to a range of state-of-the-art assays for rapid epigenetic profiling in disease, model development, preclinical testing, and clinical studies.

Our expert team are on hand to offer guidance and support.

Get in touch for more information:

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 volition.com

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Developed based on
CLSI standard