

Label-Free Assay Services from SAMDI Tech



A breakthrough technology to accelerate drug discovery

SAMDITech technology combines the advantages of surface chemistry with mass spectrometry to create a true label-free assay technology. Our proprietary method eliminates the need for cumbersome antibodies, fluorescent labels or radioactivity. Now it's possible to monitor multiple analytes with greater convenience and accuracy than ever before. Even the most challenging biochemical targets can be effectively analyzed. Using our custom software, we also offer fully automated analysis of your results—presenting large volumes of data in clear, easy-to-interpret graphic formats.

OUR SERVICES

- Assay Development
- High-Throughput Screening
- Peptide Substrate Discovery and Profiling

ADVANTAGES of our unique assay technology:

FAST

- Label-free
- No solid phase extraction
- Purifies 1,536 samples in seconds

EFFICIENT

- Monitors multiple analytes in a single sample
- 10,000s of samples per day

SENSITIVE

- Latest MALDI-TOF technology
- Quantitative with Z-factors >0.8
- Reaction volumes as low as 1 μ l

COMPATIBLE

- Plug-and-play assay format for peptides, proteins, and nucleic acids
- Several analyte capture chemistries available
- Uses standard lab automation
- Uses 384 and 1536 plate formats

SAMDITech technology can be used to monitor:

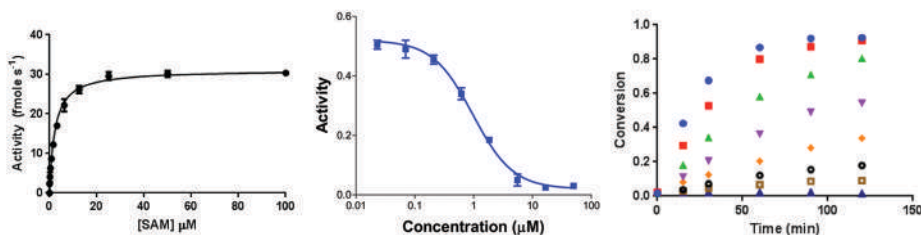
- Acetylation
- Methylation
- Ubiquitination
- Phosphorylation
- Proteolysis
- Many other complex biochemical processes

A CLOSER LOOK at our services

Working with your organization on a contract basis, we deliver services that simplify and accelerate your drug discovery research.

Assay Development

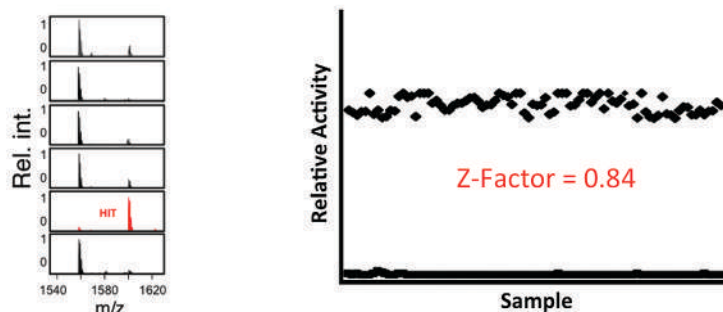
- Assay transfer to the unique SAMDI format
- K_m determination
- [Enzyme] vs. velocity
- IC_{50} determination
- DMSO tolerance
- Full 384 well plate uniformity with Z'-factor
- All multipoint with error bars



Left: K_m determination. Center: $B-IC_{50}$ determination. Right: [Enzyme] vs V_o .

HTS | High-Throughput Screening

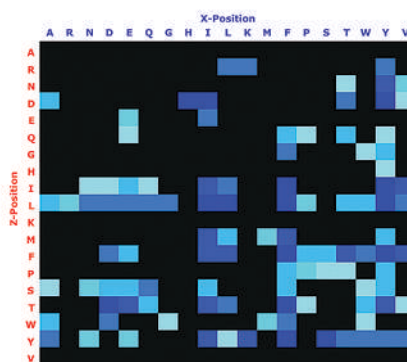
- Screening of your compound library or our own diverse, 350,000-molecule library against your target
- Identification of compounds, IC_{50} rank ordering and Hill slopes in a convenient report format
- Also available: LC-MS of hit compounds for identity and purity verification



Left: Representative spectra from a 100,000 compound screen of a histone deacetylase. Right: A plate uniformity assay.

Peptide Substrate Discovery and Profiling

- Discovery of new peptide substrates
- Identification of optimal substrates for HTS
- Kinetic analyses on entire peptide arrays



A sample heat map of biochemical activity.

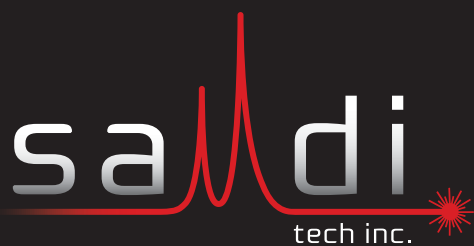
In this sirtuin deacetylase profile, enzyme activity and substrate specificity can be seen on a 361-peptide array (GXKAcZGC).

Try SAMDI with your target free-of-charge (up to 384 wells).

SAMDI experts are ready to talk with you about the most efficient, cost-effective way to accelerate your current discovery projects. Contact us to learn more.

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