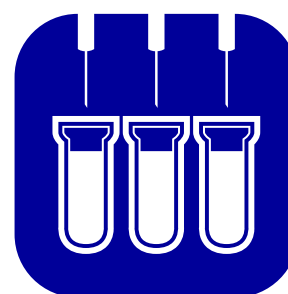

Evotec (US) Sample Management – Branford, CT

For further information:

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303B College Road East
Princeton, NJ 08540
+1 732 329 2355 x3308
info@evotec.com

Offering

Evotec is uniquely qualified in delivering your Compound and Library management needs through over a decade of being the world's leading Compound Management operation. Evotec expanded its operational presence in 2013 by adding a location in Branford, CT which is strategically positioned to support the strong presence of Evotec's drug discovery collaborators along the East Coast of the United States.



Our service offerings include:

- ▶ Cost effective compound identification, selection, and procurement
- ▶ High-throughput compound analysis
- ▶ Multi-format plating and reformatting
- ▶ Inert atmosphere and low temperature storage and processing
- ▶ Fast order fulfillment and worldwide delivery
- ▶ Multi-site disaster recovery and business continuity
- ▶ “In-sourcing” of Evotec compound management staff to client sites

Our compound management experience, primarily from the large pharma and government sector, reinforces that Evotec understands our client's needs and deadlines. Each client has a dedicated Project Manager who provides a single point of contact to ensure an open line of communication is always maintained.

Facility expansion

In mid-2018 Evotec expanded its Branford facility footprint with an additional 13,000 square feet of lab and office space. Already housing additional -20° C and ambient storage capacity, the expansion provides several thousand square feet of customizable space to meet future project needs.

Alongside potential storage capacity of greater than 5 million samples, Evotec is now able to custom design secure lab space such as clean lab facilities, analytical chemistry, and biological sample handling environments. The expansion of Evotec's Compound Management facilities is accessed through existing workspace which provides the same high level of sample security and provides easy transfer to existing equipment and workspace.



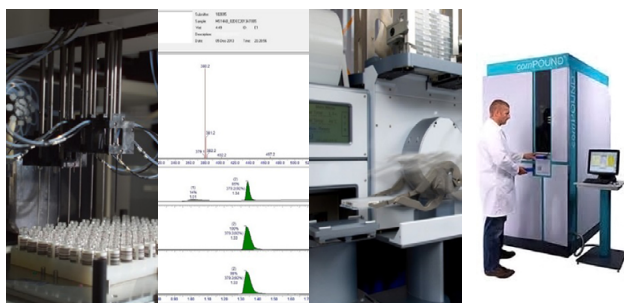
Quality management

Evotec operates under the ISO9001:2008 Quality Management and internal auditing principles but is not formally ISO9000 certified. We have well-defined and documented procedures to monitor and ensure the consistency of our output. Our process enables us to find defects early in the process and our procedures ensure corrective action is taken whenever a defect occurs, with the goal being to implement corrections with minimal impact to our final deliverables.

Compound identification, selection, and procurement

Evotec has extensive experience in the identification, selection, and procurement of sub-collections of compounds possessing very specific (including commercial, physicochemical, or bioactivity-related) properties. Evotec has the capability to apply compound identification tools as required by the client.

Once compounds are identified for purchase, our Project Management group consults with selected suppliers to negotiate terms on behalf of our client requirements, e.g. price, purity, and format. Evotec purchases compounds on a regular basis for a number of clients; therefore, the client can benefit from our vendor relations and volume discounts.



Compound storage

Evotec has invested in industry leading automated storage systems and supporting informatics. Storage capabilities support vials, tubes, plates and bulk materials -80° C, -20° C, and ambient temperatures, as well as inert atmosphere and controlled humidity environments. Actual storage conditions are dictated by sample type, containers, and length of storage. Automated tube storage systems are equipped with high-speed pickers for fast arraying of tubes to support large plating campaigns and rapid follow up. Evotec can also prepare a Disaster Recovery set of the client's

collection for storage at one of our other compound management facilities. This set can be readily accessed and processed for distribution as the client's request.

Compound dispensation and reformatting

DMSO Solutions

Evotec has the capability for automated arraying of large numbers of compounds in DMSO between a large variety of containers suitable for distribution or storage. Our extensive liquid handling resources cover the widest range of possible volumes.

- ▶ High volume capabilities are handled by the eight channel varispan automated liquid handlers such as Tecan and Hamilton systems, that can dispense and transfer 5 uL to multi-milliliters to and from vials, tubes and plates.
- ▶ In the middle of the volume range are the Agilent Bravo and Biosero plate replication systems that can dispense 1 uL to 2 mL to and from 96, 384 and 1536 well SBS format plate or tube arrays.
- ▶ Dispenses on the low end of the volume range occur on the LabCyte Echo that can deliver volumes below 1 uL via acoustic technology.

Neat Compound Dispensation

Evotec has the capability to transfer neat samples via manual weighing, volatile solvent transfer (VST), or solvent transfer methods.

Compound shipment

Our team has extensive experience in shipping chemicals, research compounds, controlled substances, and reagents. Evotec delivers and receives compounds in all formats, both domestically and overseas, including, but not limited to, North America, Europe, and Asia. We are well-versed in documentation requirements, tariff classification, and import/export customs requirements. We have the ability to facilitate the import/export processes through the use of Brokers as required by the Client.

Compound quality control

Evotec typically uses a LC-MS quality control (QC) process to determine sample purity and verify identity by molecular weight to ensure that all collections start with high quality compounds. Systems include a Waters LCT Premier system featuring positive and negative ESI and UV and ELS detection.



Data management

Evotec currently uses the industry-leading commercial application, Titian Mosaic, to manage, record, and report all manipulations of client samples. This system delivers end-to-end functionality and traceability.

Order ID	Order Date	Operation	Next Operation	Barcode	Volume	Location
1000	2012-01-01	From Solution Tubes (By Barcodes)	Cloning Stock	1000000	500	Storage Pt.
1001	2012-01-01	From Solution Tubes (By Barcodes)	Cloning Stock	1000001	500	Storage Pt.
1002	2012-01-01	From Solution Tubes (By Barcodes)	Cloning Stock	1000002	500	Storage Pt.
1003	2012-01-01	From Solution Tubes (By Barcodes)	Cloning Stock	1000003	500	Storage Pt.
1004	2012-01-01	From Solution Tubes (By Barcodes)	Cloning Stock	1000004	500	Storage Pt.
1005	2012-01-01	From Solution Tubes (By Barcodes)	Cloning Stock	1000005	500	Storage Pt.
1006	2012-01-01	From Solution Tubes (By Barcodes)	Cloning Stock	1000006	500	Storage Pt.
1007	2012-01-01	From Solution Tubes (By Barcodes)	Cloning Stock	1000007	500	Storage Pt.
1008	2012-01-01	From Solution Tubes (By Barcodes)	Cloning Stock	1000008	500	Storage Pt.
1009	2012-01-01	From Solution Tubes (By Barcodes)	Cloning Stock	1000009	500	Storage Pt.
1010	2012-01-01	From Solution Tubes (By Barcodes)	Cloning Stock	1000010	500	Storage Pt.
1011	2012-01-01	From Solution Tubes (By Barcodes)	Cloning Stock	1000011	500	Storage Pt.
1012	2012-01-01	From Solution Tubes (By Barcodes)	Cloning Stock	1000012	500	Storage Pt.
1013	2012-01-01	From Solution Tubes (By Barcodes)	Cloning Stock	1000013	500	Storage Pt.
1014	2012-01-01	From Solution Tubes (By Barcodes)	Cloning Stock	1000014	500	Storage Pt.
1015	2012-01-01	From Solution Tubes (By Barcodes)	Cloning Stock	1000015	500	Storage Pt.
1016	2012-01-01	From Solution Tubes (By Barcodes)	Cloning Stock	1000016	500	Storage Pt.
1017	2012-01-01	From Solution Tubes (By Barcodes)	Cloning Stock	1000017	500	Storage Pt.
1018	2012-01-01	From Solution Tubes (By Barcodes)	Cloning Stock	1000018	500	Storage Pt.
1019	2012-01-01	From Solution Tubes (By Barcodes)	Cloning Stock	1000019	500	Storage Pt.
1020	2012-01-01	From Solution Tubes (By Barcodes)	Cloning Stock	1000020	500	Storage Pt.
1021	2012-01-01	From Solution Tubes (By Barcodes)	Cloning Stock	1000021	500	Storage Pt.
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1099	2012-01-01	From Solution Tubes (By Barcodes)	Cloning Stock	1000099	500	Storage Pt.
1100	2012-01-01	From Solution Tubes (By Barcodes)	Cloning Stock	1000100	500	Storage Pt.

Evotec interacts with client LIMS through Web Services, or Titian’s Mosaic Connector. This allows for seamless order placement and real-time inventory visibility. In cases where a complex LIMS is not in operation, Evotec also provides a web-based ordering and inventory portal.

In support of our disaster recovery and business continuity plans Evotec performs a nightly backups for critical data and servers within sample management. Data is stored locally and transferred to an offsite location. All data transmissions are encrypted and password protected at all times for security and confidentiality.

In-sourcing and consulting services

If a prospective client decides to retain compound management services within their operation then Evotec also offers both in-sourcing and/or consulting services. In these instances Evotec reviews requirements with our clients and design solutions including need identification, process design, facility layout, process workflow, vendor qualification and selection, and even complete staffing and management of onsite services.

Our in-sourcing program provides scientific staffing specifically designed to give clients the “non-permanent” workforce needed for anywhere from one year to multiyear partnerships. We hire, train and manage our employees to perform analytical scientific programs at client sites, using their quality systems. This advanced staffing model provides a non-permanent, long-term and cost-effective way to meet compound management staffing needs.

Evotec Track Record

- ▶ Built and operate both private and public screening libraries since 2004
- ▶ Largest individual library consists of ~1,800,000 compounds
- ▶ Over 40 client collaborations working to individual specifications
- ▶ Over 44,000,000 samples shipped to 400+ recipients in 50+ countries
- ▶ Experience with 200+ global compound suppliers
- ▶ 5 global compound management sites, with over 120 FTE’s



Case study: Library design, acquisition & management

- ▶ Library Design: US/UK Collaboration
- ▶ Sourcing: 225,000 compounds sourced from top tier suppliers
- ▶ Quality Control: Identity & purity by LC-MS and LAT
- ▶ Preparation of working store tubes & long term storage vials
- ▶ Data Management & Inventory Management System
- ▶ Annual full set plating for acoustic dispensing
- ▶ Cherry Picking for hit follow-up & full set plating for acoustic manipulation
- ▶ Global shipments to collaborators and alliance members

Compound Storage	Liquid Handling	Quality Control	Inventory & Data Management	Powder Handling	Compound Procurement & Distribution
Controlled temperature and humidity	Multidrop/Hydra Bulk dispensing (<25µL)	Waters LC-MS	Proprietary in-house software	Manual weighing	EvoSource Compound database (~23M unique structures)
Inert atmosphere (nitrogen or dry air)	Hamilton/Tecan Span-8 head (1µL-3mL)	Waters µPLC	Titian Mosaic	Gravitrack/ XL-100 automated weighing	Evotec preferred vendor list
Ambient storage temperature	Agilent Vprep/ Bravo 96/ 384 well head (1µL-250µL)	High Resolution Waters µPLC	Excel/Access/ Oracle managed database solutions	Compound solubilisation	Acceptance criteria regulated
-20°C storage temperature	Labcyte Echo variable volume (<1µL)	214nm, 254nm, ELSD measurements	Dynamic inventory control, barcode driven	Restricted material licensed	Global shipping and receiving
-80°C storage temperature	Manual pipetting or automated solutions	DMSO solubility measurements	Alliance Management personnel		Evotec preferred courier provided
Automated storage & cherry picking	Volatile Solvent Transfer & Evaporation				Custom synthesis
Manual storage	Inert atmosphere (Nitrogen or dry air)				

Services related to the case study