Altogen Labs: 
Company Information & Services

Provider of Preclinical Research Services (GLP/non-GLP) for Drug Discovery
Efficacy and Pharm/Tox IND contract research studies (clients worldwide)
100+ Xenograft Models (validated in-house) and IND-enabling Toxicology studies
100% IP belongs to client, experienced IACUC-regulated barrier facility

Contact us: info@altogenlabs.com | Read more at AltogenLabs.com
ALTOGEN® 11200 Menchaca Road 203 • Austin • TX • 78748 • USA 512-433-6177
Background

- Altogen Labs is headquartered in Austin, Texas.

- Altogen Labs is a GLP certified and IACUC regulated laboratory that provides research services for pharmaceutical, biotechnological, and academic institutions worldwide.

- We provide both preclinical efficacy (xenograft) and safety (Pharm/Tox) studies. Both GLP and non-GLP services are available.

- For xenograft efficacy studies we provide over 120 in-house validated CDX and PDX animal models: AltogenLabs.com/xenograft-models

- 100% of IP belong to the client. We offer all types of preclinical services, both in vivo and in vitro.
Clients We Have Worked With:

Video referrals by Savara Pharmaceuticals and Terapio Corp:

https://youtu.be/C83LdvCe6u8

also available at

AltogenLabs.com
What kind of services does Altogen Labs provide?

Services include:

- Safety toxicology studies
- Efficacy studies
- Drug discovery
- Pharm/tox safety
- Imaging studies
- Over 90 in-house validated xenograft models
- Stable cell line development in just 28 days
- Cryopreservation
- Cell banking
- … and much more
Preclinical research services:

- Safety Toxicology
  - Sample Report
  - 282 pages
- Efficacy Testing:
  - In vitro (cell lines)
  - In vivo (xenograft animal models)
- Therapeutic RNAi Development: Targeted siRNA, qPCR Assays
- Liposome Encapsulation Services: small RNA, DNA, Proteins
- ELISA and Cell-Based Assay Development (Cell Cycle, Viability)
- Apoptosis Assay: Caspase-3 and Caspase-7 Cell Line Screen
- RNAi Consulting: Technology Development and Evaluation

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RNA interference (gene silencing) services:

- *In Vivo* siRNA Delivery and Tissue Targeting (*In Vivo* RNAi)
- Generation of Tetracycline-inducible RNAi Gene Knockdown Cell Lines
- PCR Cloning: DNA Vector Construction (shRNA)
- RNAi Manufacturing and CRO Services
- RNAi Screen Pathway Analysis: siRNA and microRNA
- Quantitation sh/siRNA-induced Knockdown by qRT-PCR and WB
- Genome-wide siRNA and microRNA High-throughput Screens
- Stable RNAi Cell Line Generation: Stable Gene Knockdown
- siRNA Transfection and RNAi Cell-based Library Screening
- siRNA Liposome Encapsulation Service
- Transient (siRNA) and Stable (shRNA) Transfection Services
**In Vivo siRNA Delivery**

- Altogen Labs provides A-to-Z RNAi in vivo delivery services: custom si/miRNA liposome encapsulation, chemical modification, in vitro validation, in vivo tissue-targeted delivery.

- Assays include: oligonucleotide accumulation (TaqMan), target mRNA (RT-PCR) and protein expression levels (WB and ELISA).
Liposome Encapsulation Services

We offer generation of various liposomal formulations via microfluidization, sonication, extrusion, and other methods. Please note that there are many different liposome formulations referenced in literature - these liposomes vary based on the type of molecule that need to be encapsulated (RNA, DNA, protein, small molecule compounds). We are a CRO company and can generate any type of liposomal formulation, as well as these eight standard liposome formulations:

Standard Liposome #1: DSPC : Cholesterol = 2 : 1
Standard Liposome #2: DMPC : DMPG : Cholesterol = 1 : 1 : 1
Standard Liposome #3: DOPC : Cholesterol : DPPG : Triolein = 7 : 7 : 1 : 1
Standard Liposome #5: EPC : Cholesterol = 55 : 45
Standard Liposome #6: HSPC : Cholesterol : PEG2000-DSPE = 12 : 8 : 1
Standard Liposome #7: HSPC : Cholesterol : DSPG = 2 : 1 : 0.8
Standard Liposome #8: DOPC : Cholesterol : Cardiolipin = 5 : 4 : 1
Development of stable cell lines services:

- Generation of Stable Cell Line in 28 Days
- Stable RNAi Cell Line Development: shRNA Gene Knockdown
- Protein overexpression: Mammalian stable cell line development
## Cell Lines Available

100+ Cell Lines available for *in vitro* and *in vivo* services, including:

<table>
<thead>
<tr>
<th>Cell Line</th>
<th>Tissue</th>
<th>Disease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caki-2</td>
<td>Kidney</td>
<td>Clear Cell Carcinoma</td>
</tr>
<tr>
<td>PANC-1</td>
<td>Pancreas</td>
<td>Epithiloid Carcinoma</td>
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<tr>
<td>SK-MEL-2</td>
<td>Skin</td>
<td>Malignant Melanoma</td>
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<tr>
<td>SK-OV-3</td>
<td>Ovary</td>
<td>Adenocarcinoma</td>
</tr>
<tr>
<td>U-87 MG</td>
<td>Brain</td>
<td>Glioblastoma/Astrocytoma</td>
</tr>
<tr>
<td>A431</td>
<td>Epidermis</td>
<td>Epidermoid Carcinoma</td>
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<tr>
<td>SW-480</td>
<td>Colon</td>
<td>Adenocarcinoma</td>
</tr>
<tr>
<td>HeLa</td>
<td>Cervix</td>
<td>Adenocarcinoma</td>
</tr>
</tbody>
</table>
PDX and CDX Models

- Altogen Labs offers over 120 established PDX and in-house validated CDX models to accelerate oncology drug development.

- We support clients from study design phase through patent or regulatory submissions (100% of IP belongs to the client).
Xenograft Animal Services

- Altogen Labs provides validated xenograft cancer animal models (biodistribution, PK/PD, imaging studies). We offer assistance in choosing the best model suitable for clients project experimental goals.

- Animal handling and maintenance at our facility is regulated by IACUC and compliant to GLP standards and guidelines.

- We provide detailed experiment procedures, health reports, and experimental data.
Example of Xenograft Model

**U87 Xenograft Model**

- **Group 1 = Control (Buffer Only, Non-treatment)**
- **Group 2 = Cisplatin (3.5 mg/kg every 7 days)**
- **Group 3 = Bevacizumab (10 mg/kg every 3 days)**
- **Group 4 = Nimustine (20 mg/kg once every 7 days)**
- **Group 5 = β-clemene (50 mg/kg/day for 7 days)**

Validated U87 Xenograft Model

[www.AltoGenLabs.com](http://www.AltoGenLabs.com)

**Request a quote:**

- Email Us

  info@altoenlabs.com

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## Available Mouse Strains

<table>
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<tr>
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<th>B cells</th>
<th>NK cells</th>
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Our commitments

Altogen Labs is committed to providing high-quality results efficiently and ethically. We have committed to:

- Meet timeline expectations
- Sustain clear communication with all clients
- Exceed quality expectations
- Strictly follow all GLP and IACUC regulations
- Preserve client confidentiality
Compliance to Good Laboratory Practice

- What is Good Laboratory Practice, or "GLP"?

Good Laboratory Practice is a required set of regulations that ensures that preclinical testing is conducted in a manner that guarantees integrity and high quality that can be trusted.

The Food and Drug Administration determines the set of guidelines that make up the GLPs.
Regulatory solutions

Our team observes and follows all regulations for agency demands and laboratory protocol:

- FDA, EMA, PMDA regulatory practices
- Novel formulations
- Anti microbial efficacy studies
- NDA study design
- E/L programs
- Patent challenge
Your project is our project!

Your project and satisfaction are our top priority, and we maintain constant communication with all clients to make sure every goal is being completed.

- Over 500 projects completed since 2009
- Scientists and staff with dozens years of preclinical laboratory research and expertise
- 100+ in-house validated xenograft models
**Biological capabilities**

- Cell line development
- Isoelectric focusing/capillary isoelectric focusing
- Microbial testing
- Bacterial endotoxin testing
- High-performance liquid chromatography
- Structural characterization
- Large molecule method development and validation (potency, purity, etc.)
- Bioactivity testing
- Etc.
In-house Stability Program

- Temperature control and cycling
- Photostability studies
- Back-up systems for power
- Power loss protocol
- Automated monitoring
- Customized conditions
Project management

- Open line of communication and consultation throughout projects
- Quality assurance procedures
- Technology transfer
- Technology validation
- On-site monitoring
- Qualified suppliers
CDMO Capabilities

Biological
- Cell line development
- DSP
- Cell bank establishment

API
- General APIs
- Sterile, fermentation, and high potency APIs
Biological Manufacturing

- Cell line development
- Cell bank establishment
- DSP, USP
- Characterization and Analysis
- 100% GLP compliant
Contract research biology CRO services (GLP):

- *In Vivo* Toxicology Service (Mouse, Rat)
- Teratoma Formation and Analysis Service
- Stimulation of Adipogenesis (Gly)
- Cell Culture Decontamination Service
Generation of Stable Cell Lines

- Stable cell lines over-expressing a protein of interest, or RNAi construct targeting a gene of interest, are powerful research tools for the production of recombinant antibodies, drug screening, and gene function studies.
Microorganism identification (16s sequencing) services:

- What is Microorganism Identification? Method Description
- Scientific Background: Specific 16S rRNA Regions
- Bacterial Analysis: 16S Sequencing
- Microbial Identification Service: Applications
Bioremediation products and services:

- Bioremediation Products
- Oil-degrading Bacteria
- Bioremediation Services
**Cryopreservation and cell banking services:**

- Cryopreservation and Cell Banking Service (GLP-compliant)
- Cell Banking Service: Master Cell Bank (MCB, WCB) Generation
Keep up with our news

- Altogen Labs is continuously releasing news about recent development and additions to the company. Stay up to date with our newest additions by viewing our news page.

- Read here: https://altogenlabs.com/news
Technical support and QA/QC teams ensure and support the company's high quality products and services. We support clients from study design phase through patent or regulatory submissions (100% of IP belongs to the client).

Altogen Labs offers instant quotes, comprehensive service packages, and competitive prices.

We are happy to discuss your experimental details to help generate accurate price quotes and timeline estimates (please e-mail study details to info@altogenlabs.com, or call us at 512-433-6177)

Follow this link to request a quote: https://altogenlabs.com/request-quote
Facilities & Equipment

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Provider of Global Contract Research Services Accelerating Preclinical Research, Drug Discovery & Therapeutics
Facilities & Equipment
Facilities & Equipment
Contact Us

- Altogen Labs has a variety of services available, and a professional team that brings years of experience and specialization. High-quality results and efficiency are prioritized in all past and future projects.

- Please contact us by emailing info@altogenlabs.com or calling us at 512-433-6177 to discuss your project and for us to provide an immediate price quote.

Contact us to discuss details, timeline estimates, and price quotes!