

# ONCOLOGY PORTFOLIO

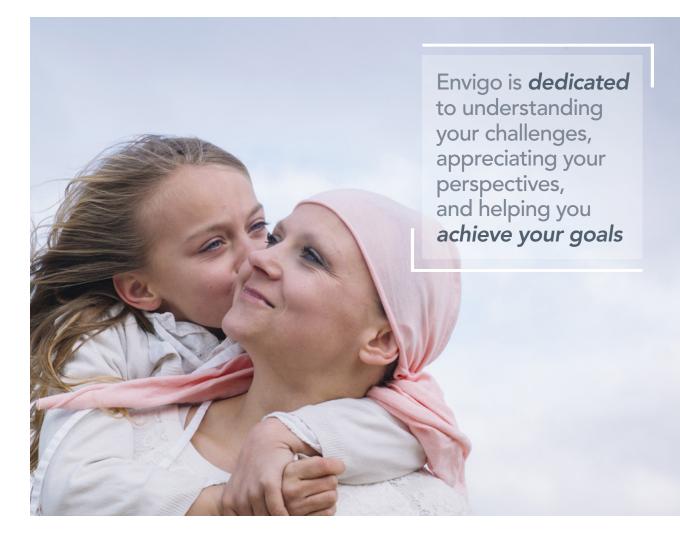
Your oncology development partner



# Together, we can enhance life and create a better future

At Envigo, we understand that our customers conduct research and develop products that have the potential to offer significant improvements to global health. We also realize achieving that potential has grown more challenging. That is why we remain focused on your goals, needs, and expectations, ensuring you have a trusted partner to advance your life-changing products.

By consistently delivering scientific excellence and outstanding customer service, you can be confident that Envigo is dedicated to understanding your challenges, appreciating your perspectives, and helping you achieve your goals. Through transparent communications, proactive project management, flexible solutions, and an unwavering focus on consistent quality, Envigo is committed to working collaboratively with you to secure the potential of your products.



# Confidently conduct your research with a preferred research models provider

Envigo provides the broadest range of research models and related services to the pharmaceutical and biotechnology industries, government, academia, and other life science organizations. As the largest organization that is solely dedicated to providing research models and related products and services, we are committed to helping researchers realize the full potential of their critical R&D projects as we fulfill our mission to work together to build a healthier and safer world. Read more at envigo.com

Guided by decades of experience and delivered by more than 1,200 employees across 20 sites worldwide, Envigo provides research models, lab animal diets, research model services, and custom research studies to our customers. Envigo is a global company with corporate and divisional headquarters for its research models and services business in Indianapolis, Indiana.



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## Oncology portfolio

At Envigo, we are committed to providing you with a comprehensive portfolio of high-quality products and services for the research community worldwide. Research Model Consulting

Cell Line Reference Tool Technical Services Consulting Model Generation Consulting

#### **Oncology Models**

Immunodeficient Models Nude Mice, SCID Mice, Rag Mouse, Nude Rat Emerging Models

#### Immunocompetent Models

Traditional Models PDX Models Spontaneous and Inducible Models Syngeneic Models

#### Custom Research Studies

Monoclonal Antibody Production Preclinical Studies (PK/PD) Tumor Model Services (PDX or CDX)

#### Research Model Services

Preconditioning Surgical Services Contract Breeding Cryopreservation & Rederivation Health Monitoring (EU and Asia)

Custom Mode Generation Services

CRISPR Zinc-finger nuclease

Transportation Services Characterization Services Molecular Oncology Services

> DNA/Mutation Analyses RNA/Expression Analyses

#### Diets and Bedding

Teklad Global Diets® Custom Research Diets Medicated Diets Bedding and Enrichment

#### **Online Resources**

Cell Line Reference Tool Health Monitoring Reports Genetic Monitoring Reports Tumor Growth Curves Colony Management and Reports

# Providing quality models and services for more than 90 years

#### Envigo oncology rodent models

Features	Benefits
Immunodeficient models have proven performance in tumor research	Extensive online database of peer-reviewed publications across major cancer cell lines at envigo.com/onco + Confident, time-efficient selection of optimal Envigo models for your research based on published references + Established tumor growth rates to help determine the expected rates of our models in your laboratory
Comprehensive quality monitoring program	<ul> <li>Confidence in microbiological quality of Envigo models</li> <li>+ Models in the U.S. screened quarterly by submission of isolator animals</li> <li>+ Isolators in Europe and Asia screened bimonthly, based on FELASA guidelines</li> </ul>
Genetic Integrity Assurance Program	<ul> <li>Robust colony management: industry-standard breeding schemes along with robust operational procedures and internal quality auditing to minimize the genetic divergence of your models</li> <li>Genetic monitoring program: comprehensive routine monitoring and a transparent view of our operations</li> <li>Genetic drift management program: a more consistent model as we address the natural mechanism of cumulative genetic drift with a routine colony refreshing program</li> </ul>
Breeding and maintenance on Teklad Global Diets®	<ul> <li>+ Reduced research variables</li> <li>+ Consistency for global harmonization</li> <li>+ Custom research diet production</li> </ul>
Global availability	Assurance of supply to support worldwide research collaborations
Model portfolio	Offers a spectrum of custom-made and catalog models that include both mouse and rat models

# Custom *in vivo* model development program

## Genetically engineered rat and mouse models to your specification

We reimagined the possibilities of genetic engineering in rats. And, we've introduced the world's fastest custom in vivo model generation service, powered by CRISPR-Cas9 genome editing technology. Go from idea to rat or mouse model in under half the time of traditional ES-cell based methods.

## Advantages of our animal model creation

- + Exclusive options—mice and rats, any strain
- + F1 breeding pair delivered in as few as 4 months
- + Guaranteed germline transmission
- + Donor plasmid design, construction and validation
- + Comprehensive project management
- + Detailed, formal project reports

## **Rodent models**

#### Immunodeficient rodent models

Envigo offers a comprehensive array of nude mice, SCID mice, Rag2 mice, nude rats, and Rag2 rats to support your research needs. Each rodent model has been characterized in a comparative table to help facilitate model selection. Our immunodeficient rodent models have proven performance in tumor uptake and growth.

Model	Nomenclature	Hair	T Cells	B Cells	NK Cells
Nude Mice					
Athymic Nude	Nude Hsd:Athymic Nude-Foxn1 <sup>nu</sup>		Nonfunctional	Functional	Functional
BALB/c Nude (EU)	BALB/cOlaHsd-Foxn1 <sup>nu</sup>	No	Nonfunctional	Functional	Functional
NMRI Nude (EU)	HsdCpb:NMRI-Foxn1 <sup>nu</sup>	No	Nonfunctional	Functional	Functional
SCID Mice					
C.B-17 SCID	C.B-17/lcrHsd-Prkdc <sup>scid</sup>	Yes	Nonfunctional	Nonfunctional	Functional
C.B-17 SCID (EU)	C.B-17/lcrHan®Hsd-Prkdc <sup>scid</sup>	Yes	Nonfunctional	Nonfunctional	Functional
SCID/Beige	C.B-17/lcrHsd-Prkdc <sup>scid</sup> Lyst <sup>bg-J</sup>	Yes	Nonfunctional	Nonfunctional	Impaired
NOD.SCID	NOD.CB17-Prkdc <sup>scid</sup> /NCrHsd	Yes	Nonfunctional	Nonfunctional	Impaired
B-NDG	-NDG NOD.CB17-Prkdc <sup>scid</sup> II2rg <sup>tm1</sup> /BcgenHsd		Nonfunctional	Nonfunctional	Nonfunctional
Rag Mouse					
R2G2 <sup>®</sup>	B6;129- <i>Rag2<sup>tm1Fwa</sup>ll2rg<sup>tm1Rsky/</sup></i> DwlHsd	Yes	Nonfunctional	Nonfunctional	Nonfunctional
Nude Rat					
Athymic Nude	Hsd:RH-Foxn1 <sup>mu</sup>	No	Nonfunctional	Functional	Functional
Rag Rat					
Rag2	HsdSage:SD- <i>Rag2</i> <sup>tm1sage</sup>	No	Nonfunctional	Nonfunctional	Functional

For a more detailed comparative model chart, visit: envigo.com/oncology\_models



For more details on our p53, Rag1, Pten, Prkdc, and Tbx21 cryopreserved models, please visit envigo.com/research-models

## Rodent models (continued)

#### Immunocompetent rodent models

Envigo offers a full line of spontaneous and inducible tumor models in addition to traditional rodent models.

Spontaneous and In	ducible Models	
Model	Nomenclature	Research Use
Mice		
A	A/JOlaHsd	Spontaneous lung tumors
B6D2F1	B6D2F1/Hsd; B6D2F1/JRccHsd	Chemical induction of bladder tumors
СЗН	C3H/HeNHsd	Spontaneous hepatocellular and mammary tumors
СВА	CBA/CaOlaHsd; CBA/JCrHsd	Susceptible to chemical induction of myeloid leukemia; hepatoma in males; mammary tumors in females
C57BL/6	C57BL/6JOlaHsd; C57BL/6JRccHsd; C57BL/6NHsd	Various syngeneic model applications; accepts murine B16F10 melanoma grafts
SJL	SJL/JCrHsd	High incidence of reticulum cell sarcoma (comparable to Hodgkin's lymphoma); leukemia
Rats		
ACI (NA)	ACI/SegHsd	Spontaneous testicular and prostate cancer in aged males; females highly susceptible to estrogen-induced mammary tumors; spontaneous pituitary tumors in both sexes
Brown Norway	BN/RijHsd	Spontaneous bladder tumors; susceptible to chemical induction of myeloid leukemia
Wistar Furth	WF/NHsd	High incidence of spontaneous leukemia and pituitary tumors

Traditional Models		
Model	Nomenclature	Research Use
Mice		
BALB/c	BALB/cAnNHsd; BALB/cOlaHsd	Various syngeneic model applications; mammary tumors in aged mammary tumors in aged mice; capable of monoclonal antibody production with injection of pristine and hybridoma cell line
Rats		
Sprague Dawley®	Hsd:Sprague Dawley® SD®	Chemical tumor induction; carcinogenicity, toxicology; spontaneous tumors
Fischer 344 (NA)	F344/NHsd	Various spontaneous tumors in aged rats; carcinogenicity

## Teklad Global Diets<sup>®</sup> The world's leading laboratory animal diets

Unwanted and unexpected variables can be problematic for research investigators. That's why Envigo offers you a range of ideal Teklad Global Diets—specifically designed to improve accuracy and reduce variability by eliminating chemicals and compounds that can impede the reliability of your results. By concentrating on reducing research variables through quality and consistency, Teklad Global Rodent Diets help you do research better.

Research Challenge	The Teklad Diets Solutions
Diet can be a source of variation	<ul> <li>Fixed formulation</li> <li>Fixed formula diets contain the same ingredients, in the exact same quantities, in every batch of diet produced</li> <li>In combination with rigorous ingredient control, variation in nutrient and non-nutrient levels is minimized, meaning consistent results for you</li> <li>ISO 9001/2015 Certified and FSMA compliant</li> </ul>
Phytoestrogens can influence the development and growth of many types of tumors. Their presence makes it difficult to predict the magnitude and direction of the response.	$ \begin{array}{l} \mbox{Minimal phytoestrogen-containing diets} \\ +  Isoflavones (daidzein and genistein) in soybean meal and coumestrol in alfalfa meal are the major sources of phytoestrogens in rodent diets \\ + \mbox{ Natural variation in the isoflavone content of soybean meal means that the concentration in the diet can vary between batches, by more than twofold \\ + \mbox{ For experimental endpoints sensitive to isoflavones, this batch-to-batch variation can lead to inconsistent results, mask treatment effects, and cause misinterpretation of compound effectiveness \\ + \mbox{ Excluding soybean meal and alfalfa meal minimizes phytoestrogens, leading to reliable, repeatable research results \\ & \qquad \qquad$
Chlorophyll in diets is a source of autofluorescence	Diets without alfalfa meal       Figure 1: Autofluorescence         + Removal of alfalfa meal improves fluorescent imaging clarity       Figure 1: Autofluorescence         + Benefits similar to purified diet, at lower cost and with no need to change diet type mid-study       Image: Construction of the second to change diet type mid-study

## Teklad Global Diets® (continued)

Research Challenge	The Teklad Diets Solutions
Nitrosamines are potential carcinogens	<ul> <li>Vegetarian diets</li> <li>+ Presence of nitrosamines in diets is attributed primarily to fish meal content</li> <li>+ Vegetarian diet effectively eliminates nitrosamines as a research variable</li> </ul>
Diet should fit your specific needs	<section-header>         Related diets with a range of appropriate options         9       Immunocompromised animals, with increased needs for thermoregulation and tumor development, benefit from diets with higher energy levels (2019X, 2020X families)         9       A variety of models are supported by diets with moderate protein and fat levels (2016, 2020X families)         9       For safety studies, lower protein and fat levels promote longevity (2014, 2016 families)         9       Transgenic breeding is maximized with extruded, higher energy, soy-free diets (2019X family)         9       Itradiated options offer superior autoclaving quality (decreased hardness and clumping) and reduce waste (2019X, 2020X)         9       Itradiated and certified options are available         Extrudeed field options are available         Device of field range         2016       2019X         2019       2019X         2019       2019X         2019       2019X         2019       2019X         2016       2019X         2019       <td< th=""></td<></section-header>
	–Control gene expression (doxycycline, tamoxifen) –Uniprim (Trimethoprim, Sulfadiazine) Diet stocked, if needed for immunocompromised models
Opportunity to collaborate is limited by differences in protocols	<ul> <li>Global availability</li> <li>+ Assurance of supply allows for international harmonization of research and aids in meaningful interpretation of results</li> </ul>

For phytoestrogen references, go to: envigo.com/phytoestrogen\_refs

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## Molecular oncology services

The Envigo Genetic Testing Services group in North America provides global Molecular Oncology Services using a variety of advanced throughput technologies customized to meet your research needs. Envigo offers state-of-the-art technology and a full spectrum of quality genetic testing services to help support your oncology research project. Our genetic experts, combined with the latest technology in a full-service and CLIA/GLP compliant laboratory, help you facilitate the discovery process.

Features	Benefits			
DNA/Mutation Analyses: Investigate the structure of the genetic architecture in your oncology model with the following services:	<ul> <li>Reduces testing variables due to sourcing from one vendor</li> </ul>			
+ Genotyping	+ Offers customized testing for			
+ Whole genome array-based analyses	maximum flexibility and value			
+ Array Comparative Genomic Hybridization (CGH)	+ Supports your project with technical			
+ Methylation analysis	and bioinformatics specialists			
+ Next-Gen sequencing	+ Provides experimental design consultation			
	+ Delivers quick turnaround times			
RNA/Expression Analyses: Investigate the function of the gene of interest in your oncology model with the following services:	+ Archives data securely for up to five years			
+ Quantitative PCR (QPCR)				

- + Whole transcriptome microarray analysis
- + RNA-Seq



## Surgical services

Envigo Surgical Services has more than 30 years of surgical experience to support your research. We provide consistent quality of surgical services, order to order, allowing you to spend time conducting valuable research instead of surgical modifications.

	Immunocompetent		Immunocompromised		
Procedures	Mouse	Rat	Mouse	Rat	
Soft Tissue	+	+	+	+	
Vascular	+	+			

#### Immunodeficient models

Surgical modification can be performed on immunodeficient rats and mice that are maintained in flexible-film isolators. These surgical procedures are performed in surgical isolators at Envigo in Indianapolis, Indiana.

- + Castration
- + Ovariectomy
- + Vasectomy

#### Immunocompetent models

#### Vascular Catheterizations

Envigo offers several options to access catheterized vessels on immunocompetent rats and mice for injection or withdrawal. These surgical procedures are performed in surgical suites at Envigo in Indianapolis, Indiana; Livermore, California; and Horst, the Netherlands.

## **Contract breeding**

Envigo's operations in North America and Europe offers you contract breeding and support services of oncology models including rederivation and revitalization, cryopreservation (both embryo and sperm), breeding, speed congenics, health and genetic maintenance, standard or custom diets, and pre-conditioning.

Features	Benefits		
Contract breeding	<ul> <li>+ Predict and deliver required cohorts</li> <li>+ Custom health and genetic surveillance programs</li> <li>+ Expertise in custom breeding protocols</li> <li>+ Highly personalized and flexible services to meet research demands</li> </ul>		
Flexible film isolator systems for managing the breeding and maintenance of your valuable models	<ul> <li>+ Controlled environmental containment area</li> <li>+ Isolator capacity ranges from 20 to 162 mouse cages</li> </ul>		

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## Monoclonal antibody production services

Envigo Bioproducts has more than 30 years of experience with in vivo (ascites) and in vitro Monoclonal Antibody Production for various global research applications. With all this understanding, Envigo Bioproducts can easily tailor a program to meet your specific needs.

Features	Benefits
cGMP-quality system (21 CFR, 210, 211 & 820)	Reliable, consistent manufacturing process
In vitro antibody & secreted protein scale-up	Flexible scale-up of hybridomas, CHO, 293 PerC6
Ascites production (immunodeficient and immunocompetent mice)	Unlimited animal access ensures quality, speed and value
Polyclonal production	Variety of species, USDA licensed, standard/custom protocols
Antibody purification	Variety of methods, low endotoxin, large-scale protein A/G

Please contact us at—North America: 800.972.4362 or bioproducts.na@envigo.com; EU and Asia: antibodies.eu@envigo.com

## Custom discovery PK and Xenograft studies

Envigo improves the efficiency of your discovery efforts by performing custom non-GLP PK and Xenograft studies, allowing you to focus on the data and other research. Through our experienced staff and on-demand supply of research models, we can quickly initiate and complete a study in the needed timeframe. We work closely with you to define and execute the study to meet your expectations.

Features	Benefits
Non-GLP Discovery PK	
Rodents and rabbits Dosing via various routes Sample and tissue collection	<ul> <li>+ Allows for screening purposes</li> <li>+ Quick turnaround time for Excel files (no full reports to QA)</li> <li>+ Less expensive than conducting a GLP study</li> </ul>
Tumor Studies (PDX or CDX)	
Immunodeficient animals Dosing via various routes Cell line options	<ul> <li>+ Access to high-quality immunodeficient animals on-site</li> <li>+ Offers experience with a wide range of tumor cell lines</li> <li>+ Allows for standard lines or cells provided by customers</li> </ul>

Please contact us at—North America: 800.972.4362 or gemsorders@envigo.com

## Tumor models and services

#### Highly characterized Patient-Derived Xenograft (PDX) models for breast cancer and melanoma

## A suite of solutions to fully support your research needs

Find your therapeutic targets and make more informed decisions with our patient-derived xenograft (PDX) tumor sources. PDX models preserve the heterogeneity of tumors, providing the best representation of the original patient tumors for in vivo efficacy studies. To empower your PDX modeling, Envigo offers the highly characterized and well-regarded Washington University Human In Mouse (WHIM) Breast Cancer PDX Model Collection and the Wistar Melanoma (WM) PDX Model Collection.

#### WHIM breast Cancer PDX Models

Envigo is continuously growing a collection of highly characterized PDX models developed at Washington University and initially described in the article by Li et al. In the publication, it shows the Washington University Human in Mouse (WHIM) lines were mostly obtained from patients with advanced disease or larger primary tumors that rapidly developed lethal metastasis.

For more information, please visit envigo.com/PDX-models

## Work with a highly characterized PDX breast cancer model

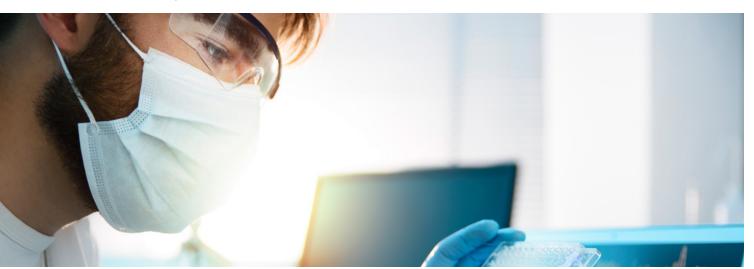
Many models already have accompanying WGS and or RNA-seq data and the bank of available characterization data is continuously growing.

Your research can also benefit from comprehensive patient history including stage at sample grafting, patient response to treatment, and ER, PR and Her2 status. For some models, quantitative proteomic profile, which includes signatures of PDXs resembling findings from breast cancer patients and the identification of overexpressed proteomic events not evident at the genomic level in both PDX and human samples.

#### Melanoma PDX models

Envigo offers the Wistar Institute Melanoma (WM) PDX model collection established from targeted therapy relapsed melanoma patients, spanning BRAF inhibitors, BRAK/MEK inhibitors, immune checkpoint inhibitors and targeted therapy and immunotherapy (TT/IT) combinations.

Read about testing second-line personalized medicine combination therapies, based on genomic and proteomic data, in patient-derived xenograft (PDX) models in *Clinical Cancer Research by Krepler et al.* 



## Health and genetic monitoring

Envigo is strongly committed to providing high-quality animals to the research community. Our health testing program provides you assurance of that commitment. Models in North America are screened quarterly by submission of live animals. Isolators in Europe and Asia are screened bimonthly, based on the FELASA guidelines.

The Envigo global routine genetic monitoring program consists of collecting tissue samples quarterly from all new pedigreed foundation colony breeding cages in non-isolator-bred colonies. Tests are conducted on five pedigreed foundation colony cages annually in isolator-bred colonies. In addition, various mutant models on either outbred or inbred backgrounds are tested annually to confirm the mutation of interest. The report below is a partial listing of the pathogens and opportunities tested on our colonies.

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## Health Monitoring Report

Latest Monthly Update: 17NOV2020

Location: Indianapolis, IN	282I-Hs	d:Athymic Nude-F	Species: Mouse		
Viruses <sup>f</sup>	Most Recent Most Recent Test Date Results <sup>a</sup>		Historical Results <sup>a,e*</sup>	Test Frequency <sup>d</sup>	Test Method
Ectromelia Virus	17NOV20	0 / 21	0 / 73	Annually	RT-PCR
Hantaan Virus	17NOV20	0 / 21	0 / 73	Annually	RT-PCR
K Virus	17NOV20	0 / 21	0 / 73	Annually	RT-PCR
Lactic Dehydrogenase Elevating Virus (LDEV)	17NOV20	0 / 21	0 / 73	Annually	RT-PCR
Lymphocytic Choriomeningitis Virus (LCM)	17NOV20	0 / 21	0 / 73	Annually	RT-PCR
Minute Virus of Mice (MVM)	17NOV20	0 / 21	0 / 136	Quarterly	RT-PCR
Mouse Adenovirus type 1 (FL)(MAD-1)	17NOV20	0 / 21	0 / 73	Annually	RT-PCR
Mouse Adenovirus type 2 (K87)(MAD-2)	17NOV20	0 / 21	0 / 73	Annually	RT-PCR
Mouse Cytomegalovirus (MCMV)	17NOV20	0 / 21	0 / 73	Annually	RT-PCR
Mouse Hepatitis Virus (MHV)	17NOV20	0 / 21	0 / 136	Quarterly	RT-PCR
Mouse Parvovirus (MPV)	17NOV20	0 / 21	0 / 136	Quarterly	RT-PCR
Mouse Polyoma Virus	17NOV20	0 / 21	0 / 73	Annually	RT-PCR
Mouse Rotavirus (EDIM)	17NOV20	0 / 21	0 / 136	Quarterly	RT-PCR
Mouse Thymic Virus (MTV)	17NOV20	0 / 21	0 / 73	Annually	RT-PCR
Murine Norovirus (MNV)	17NOV20	0 / 21	0 / 136	Quarterly	RT-PCR
Pneumonia Virus of Mice (PVM)	17NOV20	0 / 21	0 / 136	Quarterly	RT-PCR
Respiratory Enteric Virus III (REO 3)	17NOV20	0 / 21	0 / 136	Quarterly	RT-PCR
Sendai Virus	17NOV20	0 / 21	0 / 136	Quarterly	RT-PCR
Theiler's Murine Encephalomyelitis Virus (TMEV, GD7)	17NOV20	0 / 21	0 / 136	Quarterly	RT-PCR
Bacteria, Mycoplasma and Fungi					
Bordetella bronchiseptica	17NOV20	0 / 63	0 / 287	Quarterly	RT-PCR
CAR Bacillus	17NOV20	0 / 21	0 / 73	Annually	RT-PCR
Citrobacter rodentium	17NOV20	0 / 63	0 / 312	Quarterly	Culture
Clostridium piliforme	17NOV20	0 / 21	0 / 136	Quarterly	RT-PCR
Corynebacterium bovis <sup>i</sup>	17NOV20	0 / 42	0 / 182	Quarterly	RT-PCR
Corynebacterium kutscheri	17NOV20	0 / 63	0 / 312	Quarterly	Culture
Dermatophytes	17FEB20	0 / 4	0 / 144	Quarterly	Culture
Helicobacter bilis	17NOV20	0 / 63	0 / 312	Quarterly	RT-PCR
Helicobacter hepaticus	17NOV20	0 / 63	0 / 312	Quarterly	RT-PCR
Helicobacter spp	17NOV20	0 / 63	0 / 312	Quarterly	RT-PCR
Klebsiella oxytoca	17NOV20	0 / 63	0 / 312	Quarterly	Culture

Health Monitoring Reports and Genetic Monitoring Reports are available at: envigo.com/reports Genetic Integrity Assurance Program information is available at: envigo.com/GIAP

## Cell line reference tool and tumor growth library

When you select your tissue of interest and the cell line, our online tool displays the Envigo models as well as links to peer-reviewed publications by cancer researchers around the world.

Our online library of *in vivo* tumor growth data provides you with representative tumor growth curves for tumor cell lines and xenograft models of interest. The established tumor growth rates help you make more informed model decisions.

Cell Line Reference Tool available at: envigo.com/onco; Tumor Growth Library available at: envigo.com/tumor

	Cell lines	Nude mice	SCID mice		C57 mice	Human tissue	Cell lines		SCID mice		Rag2
Brain (rat glioma)	+	+			Bladder	KU-7 148, 149, 150, 151	+				
Liver	MC38-Luc1 387				+		T24 52			+	
Lung (murine)	LL2 10	+				Brain	A-172 198	+			
Lymphoma	E.G7-OVA 373				+		G55 <sup>3</sup>			+	
Melanoma (murine)	B16F10 35, 36, 250	+					HTLA-230 5, 125	+	+		
, ,							SH-SY5Y <sup>2</sup>			+	
Tumor Growth Rate for MKN-45 Cells Inoculated into Female Athymic Nude Mice						TB10 200	+				
2500	into i emale Adiyine	Nuue mie	•				U251 <sup>81, 202</sup>	+			
2000 -			T				U251 MG 198, 199	+			
e 1500 -							U251-NG2 1, 285	+			
Emm, internet volume, i		v	ſ				U87 71, 81, 117, 173, 196	+	+		+
	J						U87AEGFR 197	+			
500	5 10 15 20	25	30	35			U87 MG 4, 78, 80, 83, 133, 134, 164, 195, 198, 201, 205, 206, 209, 224, 249	+	+	+	
0 5	Day	25	30	35			U87Fluc <sup>79, 82</sup>	+			
		Data sh	own as m	iean value:	s; N=10		U87MG.wt EGFR 203	+			
							U87-TARTK 208		+		
							U138MG 203, 266	+	+		
							U373 207			+	

## Contact us

#### For customer service:

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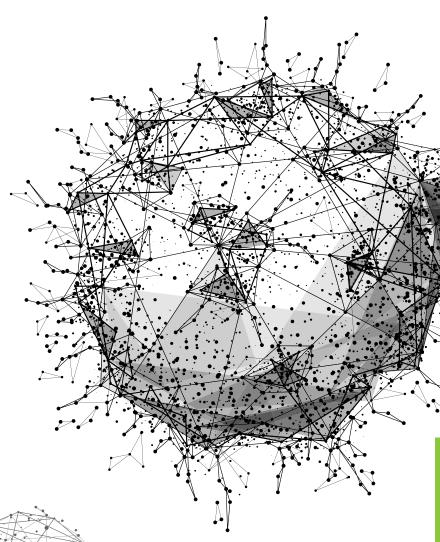
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For more oncology information, visit envigo.com/oncology