



SHrN™

MODEL	NOMENCLATURE	HAIR	T CELLS	B CELLS	NK CELLS
SHrN™	NOD.Cg-Prkdc ^{scid} Hr ^{hr} /NCrHsd	No	Nonfunctional	Nonfunctional	Impaired

Model Characteristics

The SHrN ("Shorn") is an inbred immunocompromised mouse developed by Harlan. The model was created by backcrossing the *hairless* (*Hr*) mutation on to a NOD.SCID mouse. The SHrN is a triple-immunodeficient model with desirable characteristics. Harlan was renamed Envigo in 2015.

Research Uses

The SHrN is a versatile model that can be used in the following research areas:

- + Oncology
- + Stem cell research
- + Immunology
- + Imaging applications
- + Xenograft transplantation
- + Humanization applications

Features & Advantages

SHrN mice have several features that translate into unique advantages over immunodeficient nude & SCID mice. Evaluate our SHrN *in vivo* tumor growth rate data for different cell lines at envigo.com/tumor/shrn

FEATURES	ADVANTAGES
Hairless	<ul style="list-style-type: none"> + Eliminates need to shave model, saving time and labor + Improved tumor imaging clarity + Improved observation of tumor growth
Severe Immunodeficiency <ul style="list-style-type: none"> + Deficient in T and B cells + NK cell functional deficit + No circulating complement + Decreased macrophage function + Decreased granulocyte function + Decreased dendritic cells 	<ul style="list-style-type: none"> + More immunocompromised than other hairless SCID models + Preliminary phenotyping results show promising advantages in cell uptake and tumor growth + Decreased leakiness compared to other SCID models + Enhanced acceptance and growth of cells for humanization
Inbred	<ul style="list-style-type: none"> + Less variability in research



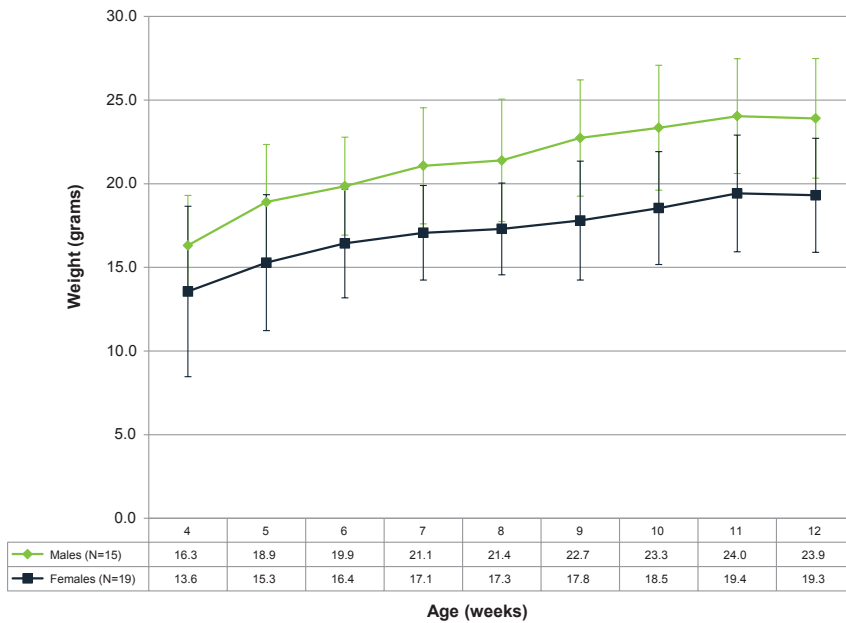
Growth Chart

The following growth chart represents the growth rates of SHrN mice. These SHrN mice originated from our facility in Indianapolis, IN. SHrN mice are maintained on Teklad Global Rodent Diet® 2919 (19% Protein).

Hairless NOD SCID (SHrN™) NOD.Cg-Prkdc^{scid}Hr^{hr}/NCrHsd

Envigo
Production Facility 2651, Greenfield, IN
(2014)

Cage floor space: 71.5 in²



Maintained on Teklad Global
Rodent Diet 2919 (19% Protein)

Growth data to be used as guideline only.
Data can be subject to differences in maintenance of rats.
Growth chart includes mean + 2 SD's representative of population distribution.

Complete Blood Counts

CBC's were completed on a cohort of SHrN mice (n = 24). Specific lab results are listed in the table below.

SHrN™ (females, 6-8 weeks; n=24)	UNITS	MEAN	STD DEV
White Blood Cells (K/uL)	K/uL	5.0	1.4
Red Blood Cells (RBC)	M/uL	8.9	0.4
Hemoglobin (HGB)	g/dL	14.8	0.6
Hematocrit (HCT)	%	52.2	2.0
Mean Corpuscular Volume (MCV)	fL	58.7	1.1
Mean Corpuscular Hemoglobin (MCH)	pg	16.6	0.3
Mean Corpuscular Hemoglobin Concentration (MCHC)	g/dL	28.3	0.3
Neutrophils (%)	%	67.3	5.1
Lymphocytes (%)	%	20.1	3.8
Monocytes (%)	%	8.2	4.2
Eosinophils (%)	%	4.3	1.3
Basophils (%)	%	0.1	0.1

Contact us

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