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NOD-scidIL2g^{null} - Mouse Strain RES1262

Mouse Information

Common Name:	NOD-scidIL2g^{null}
MGI Official Name:	NOD.Cg-Prkdc^{scid}Il2rg^{tm1Wjl}/Sz
Description:	NOD-scid IL2rg^{null} mice are deficient in mature lymphocytes and NK cells, survive beyond 16-month of age, and even after sublethal irradiation resist lymphoma development. Moreover, cytokine-mobilized human peripheral blood stem cells engraft at high levels in NOD-scid IL2rg^{null} mice and develop into human CD3+CD4+ and CD3+CD8+ T cells, Ig+B cells, myeloid cells, NK cells and plasmacytoid dentritic cells.
Categories:	HUMANE

Genetic Alterations

2) Targeted Mutagenesis

Type of Allele	Global Null
Targeted Gene	interleukin 2 receptor, gamma chain (Il2rg - NCBI GeneID:16186)
Targeted Allele	targeted mutation 1 (Il2rg^{tm1Wjl} - MGI:96551)
Description of Targeting Vector	*Not provided*
Targeting Vector Genbank File	*Not provided*

Citations

PubMedID	Citation
18096436	A new Hu-PBL model for the study of human islet alloreactivity based on NOD-scid mice bearing a targeted mutation in the IL-2 receptor gamma chain gene. (2008) *Clin Immunol* **126**: 303-14 (Added 2011-03-02 10:32:43.247619)

Strain Information

Strain Type:	Not provided
Chimera/Founder Genetic Background:	Not provided
Current Genetic Background:	Not provided (date recorded: Not provided)
Strain Description:	Not provided

Associated Images

Image 1

Description:
Human RBMC engraftment. Three indicated stocks of immunodeficient mice were injected intravenously with 20x106 human peripheral blooc mononuclear cells (PBMC) ans assessed for human cell engraftment in the blood four weeks lager. symbols represent induividual animals. Bars represent the mean percentage engraftment

Access Status

This resource is publicly viewable.

Request this Resource

Request from a **repository**

Primary contributor: **Shultz Lab**
Co-contributed by:
- Greiner Lab
- Herrera Lab

Resource Tags

mouse, mouse strain, NOD-scidIL2g^{null}

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Resource History & Actions

Approved on Mar 16, 2009
Last modified on Nov 11, 2011

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No matching resources

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No matching resources

Data courtesy of dkCOIN. Only public resources are displayed.

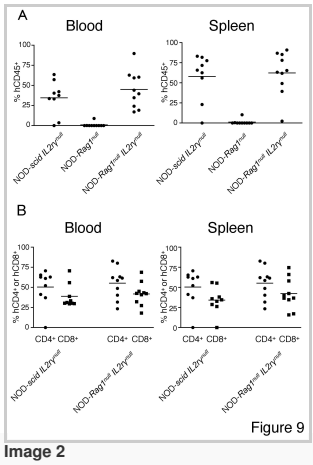


Figure 9

Reference:
18785974

Image 2

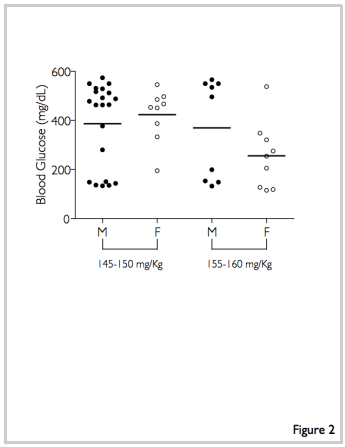


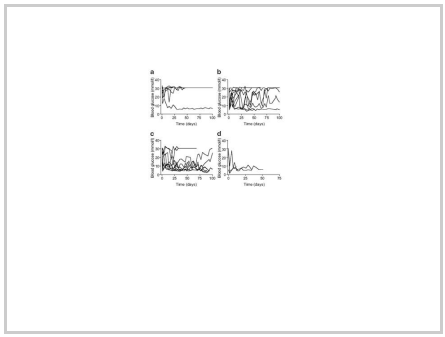
Figure 2

Description:

Induction of diabetes in NOD-scid IL2rgnull mice. HOhorts of male (black circles) and female (white circles) NOD-scid IL2rgnull mice were randomised to receive a single i.p. injection of streptozotocin at doses of 145, 150, 155 or 160 mg/kg body weight and teh results are stratified into lower dose (145 and 150 mg/kg) and higher dose (155 and 160 mg/kg). Mazimum blood glucose readings for each recipient at up to 10 days after injection are shown. Horizontal bar, mean value. (hyperglycemia)

Reference:
18563383

Image 3

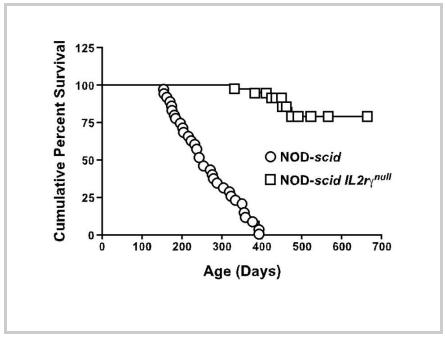


Description:

Reversal of diabetes in NOD-scid IL2rgnull mice follwoing human islet tansplantation. Mice were rendered hyperglycemic by a single i.p. injection of 140 mg/kg STZ, randomised into four different groups and received either 1,000 (a, n=6), 2,000 (b, n=10), 3,000 (c, n=11), or 4,000 (d, n=4) IEQ of human islets into the renal subcapsular space. Blood glucose levels in individual mice at each human islet dose are shown over the follow-up period. (islet transplantation)

Reference:
18563383

Image 4



Description:

Cumulative percent survival of NOD-scid IL2rgnull and NOD-scid mice as a funciton of age. Data are based on 34 NOD-scid IL2rfnull and 35 NOD-scid mice observed form birth. (survival)

Reference:
15879151

Repositories

Shultz Lab

Request this resource

Stock #: *Not provided*
Availability Notes: *Not provided*

Contact Information

Preferred Contact	
Name	Leonard Shultz
Institution	The Jackson Laboratory
Phone	207-288-6405
Email	lenny.shultz@jax.org
Primary Lab Contact	
Name	Leonard Shultz
Institution	The Jackson Laboratory
Phone	207-288-6405
Email	lenny.shultz@jax.org

Associated Publications

No publications associated

Comments

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