

My Account

Login
Create Account

Resources

View All (813)
Adenoviruses (137)
Antibodies (175)
Bioimages (67)
Genomics Studies (145)
mESC Lines (68)
Mouse Strains (120)
Miscellaneous (46)
Protocols (55)
Research Data (4)
Resource Tags (389)
Visualization (9)

Research & Cores

Core Facilities (5)
Research Highlights (5)
Research Networks
Research Objectives

Information

About the BCBC
BCBC Events
Branding & Logos
Career Opportunities
Health
NIH hESC Registry
Policies & Guidelines
Member Publications
Research Programs
Research Investigators
Member Directory
Tutorials

NOD.Cg-Rag1^{tm1Mom} Il2rg^{tm1Wjl}/Sz - Mouse Strain RES212**Mouse Information**

Common Name:	NOD.Cg-Rag1 ^{tm1Mom} Il2rg ^{tm1Wjl} /Sz
MGI Official Name:	NOD.Cg-Rag1 ^{tm1Mom} Il2rg ^{tm1Wjl} /Sz
Description:	Backcrossing of the Rag1 null allele onto the NOD/Lt strain background (NOD-Rag1 ^{null} mice) provided a radio-resistant and longer-lived model for human-cell engraftment. Mutations in X-chromosome-linked Il2rg gene cause X-linked severe combined immunodeficiency (XSCID). Immunodeficient NOD-Rag1 ^{null} Il2rg ^{null} mice tolerated much higher levels of irradiation conditioning than did NOD-Prkdc ^{scid} Il2rg ^{null} mice.
Categories:	HUMANE

Genetic Alterations


1) Targeted Mutagenesis					
Type of Allele	Global Null				
Targeted Gene	recombination activating gene 1 (Rag1 - NCBI GeneID:19373)				
Targeted Allele	<i>Not provided</i> (Rag1 ^{tm1Mom} - MGI:1857241)				
Description of Targeting Vector	<i>Not provided</i>				
Targeting Vector Genbank File	<i>Not provided</i>				
Citations	<table border="1"> <thead> <tr> <th>PubMedID</th> <th>Citation</th> </tr> </thead> <tbody> <tr> <td>18785974</td> <td>Non-obese diabetic-recombination activating gene-1 (NOD-Rag1 null) interleukin (IL)-2 receptor common gamma chain (IL2r gamma null) null mice: a radioresistant model for human lymphohaematopoietic engraftment. (2008) <i>Clin Exp Immunol</i> 154: 270-84 (Added 2009-04-21 09:46:49)</td> </tr> </tbody> </table>	PubMedID	Citation	18785974	Non-obese diabetic-recombination activating gene-1 (NOD-Rag1 null) interleukin (IL)-2 receptor common gamma chain (IL2r gamma null) null mice: a radioresistant model for human lymphohaematopoietic engraftment. (2008) <i>Clin Exp Immunol</i> 154 : 270-84 (Added 2009-04-21 09:46:49)
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2) Targeted Mutagenesis					
Type of Allele	Global Null				
Targeted Gene	interleukin 2 receptor, gamma chain (Il2rg - NCBI GeneID:16186)				
Targeted Allele	<i>Not provided</i> (Il2rg ^{tm1Wjl} - MGI:1857455)				
Description of Targeting Vector	<i>Not provided</i>				
Targeting Vector Genbank File	<i>Not provided</i>				
Citations	<table border="1"> <thead> <tr> <th>PubMedID</th> <th>Citation</th> </tr> </thead> <tbody> <tr> <td>18785974</td> <td>Non-obese diabetic-recombination activating gene-1 (NOD-Rag1 null) interleukin (IL)-2 receptor common gamma chain (IL2r gamma null) null mice: a radioresistant model for human lymphohaematopoietic engraftment. (2008) <i>Clin Exp Immunol</i> 154: 270-84 (Added 2009-04-21 09:46:49)</td> </tr> </tbody> </table>	PubMedID	Citation	18785974	Non-obese diabetic-recombination activating gene-1 (NOD-Rag1 null) interleukin (IL)-2 receptor common gamma chain (IL2r gamma null) null mice: a radioresistant model for human lymphohaematopoietic engraftment. (2008) <i>Clin Exp Immunol</i> 154 : 270-84 (Added 2009-04-21 09:46:49)
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Strain Information

Strain Type:	Congenetic Strain
Chimera/Founder Genetic Background:	Not provided

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, NOD.Cg-Rag1^{tm1Mom} Il2rg^{tm1Wjl}/Sz, RAG

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Resource History & Actions

Approved on Dec 21, 2007
Last modified on Apr 13, 2015

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No matching resources

Other Consortia

No matching resources

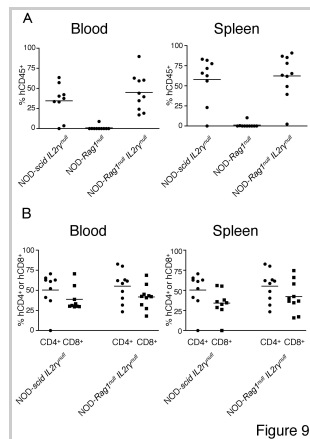
Data courtesy of [dkCOIN](#). Only public resources are displayed.

Current Genetic Background: Not provided (date recorded: Not provided)

Strain Description: Not provided

Associated Images

Image 1

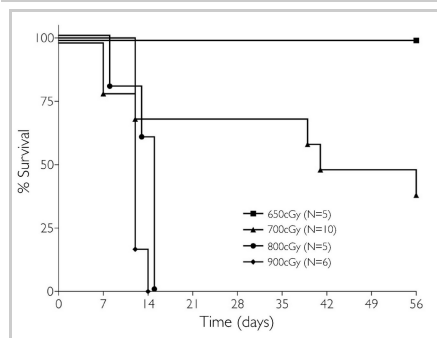


Description:

Human RBMC engraftment. Three indicated stocks of immunodeficient mice were injected intravenously with 20×10^6 human peripheral blood mononuclear cells (PBMC) and assessed for human cell engraftment in the blood four weeks later. Symbols represent individual animals. Bars represent the mean percentage engraftment.

Reference:
18785974

Image 2



Description:

Cohorts of NOD-Rag1nullIL2γnull mice were treated with varying doses of whole body irradiation and their survival determined. (survival)

Reference:
18785974

Repositories

Herrera 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

Associated Publications

No publications associated

Comments

There are no comments for this entry.

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