

**NOD.Cg-Rag1<sup>tm1Mom</sup> Dysf<sup>prmd</sup> Il2rg<sup>tm1Wjl</sup> /McaJ**Stock No: **029663** | BIAJ/NRG Congenic, Spontaneous Mutation, Targeted Mutation

Typically mice are recovered in 10-14 weeks. Contact Customer Service to place an order or for more information.

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### Donating Investigator

Michele Calos, Stanford University School of Medicine

[R E A D M O R E +](#)

## GENETIC OVERVIEW

### Genetic Background

### Generation

#### *Rag1<sup>tm1Mom</sup>*

**Alele Type**

Targeted (Null/Knockout)

**Gene Symbol***Rag1***Gene Name**

recombination activating gene 1

#### *Il2rg<sup>tm1Wjl</sup>*

**Alele Type**

Targeted (Null/Knockout)

**Gene Symbol***Il2rg***Gene Name**

interleukin 2 receptor, gamma chain

#### *Dysf<sup>prmd</sup>*

**Alele Type**

Spontaneous

**Gene Symbol***Dysf***Gene Name**

dysferlin

[V I E W G E N E T I C S](#)

## RESEARCH APPLICATIONS

Immunology, Inflammation and Autoimmunity Research  
Research Tools  
Internal/Organ Research  
Cancer Research  
Hematological Research  
Mouse/Human Gene Homologs  
Neurobiology Research

VIEW ALL RESEARCH APPLICATIONS

### BASE PRICE

Starting at:

\$2,854.50 Domestic price Cryo Recovery

VIEW PRICE LIST

## Details

### Detailed Description

These BIAJ/NRG mice are homozygous for the *Rag1*<sup>null</sup> and *Dysf*<sup>prmd</sup> mutations, and homozygous (for females; or hemizygous for males) for the X-linked *IL2rγ*<sup>null</sup> mutation. The NRG platform allows transplantation studies related to progressive muscular dystrophy due to defects in the dysferlin gene. No dysferlin protein was detected in gastrocnemius muscle from 6 month old mice by immunohistochemical analysis. BIAJ/NRG mice exhibit progressive muscular dystrophy phenotype similar to the phenotype observed in B6.A-Dysf<sup>prmd</sup>/GeneJ (BIAJ) (Stock No. [012767](#)) mice.

In gene therapy experiments, a luciferase transgene, which is rejected in immune-competent mice, was retained by the BIAJ/NRG mice for more than 6 months.

Females homozygous for all 3 mutations (and males homozygous for *Rag1*<sup>null</sup> and *Dysf*<sup>prmd</sup>; hemizygous for the X-linked *IL2rγ*<sup>null</sup> mutation) are viable and fertile.

### Development

### Control Suggestions

### Selected References

## Genetics

[+ Rag1<sup>tm1Mom</sup>](#)

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[+ Il2rg<sup>tm1Wjl</sup>](#)

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[+ Dysf<sup>prmd</sup>](#)

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## [- Disease/Phenotype](#)

[+ Disease Terms](#)

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[+ Research Areas By Phenotype](#)

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[+ Mammalian Phenotype Terms by Genotype](#)

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[+ References](#)

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## [- Technical Support](#)

C O N T A C T   T E C H N I C A L   S U P P O R T

### Genotyping Protocols

Probe:[Il2rg-PROBE](#)

Standard PCR:[Dysf](#)

Standard PCR:[Rag1Alternate1](#)

[Genotyping resources and troubleshooting](#)

### Breeding Considerations

When maintaining a live colony, females homozygous for the *Rag1*<sup>null</sup>, *Dysf*<sup>prmd</sup> and *IL2rγ*<sup>null</sup> mutations may be bred with males homozygous for the *Rag1*<sup>null</sup>, *Dysf*<sup>prmd</sup> mutations and hemizygous for the X-linked *IL2rγ*<sup>null</sup> mutation.

[Additional Breeding and Husbandry Support](#)

### Citation

When using the BIAJ/NRG mouse strain in a publication, please [cite the originating article\(s\)](#) and include JAX stock #029663 in your Materials and Methods section.

### Animal Health Reports

[Facility Barrier Level Descriptions](#)

*Production of mice from cryopreserved embryos or sperm occurs in a maximum barrier room, [G200](#)*

## ➔ Pricing & Availability



Cryo  
Recovery

Typically mice are recovered in 10-14 weeks. Contact Customer Service to place an order or for more information.

## Domestic International

Pricing effective for USA, Canada and Mexico shipping destinations

### CRYORECOVERY - DOMESTIC NOT-FOR-PROFIT & ACADEMIC PRICING

SERVICE/PRODUCT	DESCRIPTION	PRICE
<a href="#">Cryo Recovery</a>	Homozygous for Rag1<tm1Mom>, Heterozygous for Dysf<prmd> and Homozygous females and Hemizygous males for Il2rg<tm1Wjl>	\$2,854.50

### RELATED PRODUCTS AND SERVICES

<a href="#">Frozen Mouse Embryo</a>	NOD.Cg-Rag1<tm1Mom> Dysf<prmd> Il2rg<tm1Wjl>/McaJ Frozen Em	\$2595.00
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Phone: 207-288-6470

Email: [TechTran@jax.org](mailto:TechTran@jax.org)

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