CBByJ.Cg-Foxn1 nu/J

Stock No: 000711 | nude

- Congenic, Spontaneous Mutation

PLACE ORDER

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

Overview

Also Known As: nude

These mice carry a spontaneous mutation at the Foxn1 locus characterized by abnormal hair growth and defective development of the thymic epithelium.

READ MORE +
### Foxn1<sup>nu</sup>

<table>
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<tr>
<th>Allele Type</th>
<th>Gene Symbol</th>
<th>Gene Name</th>
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<tr>
<td>Spontaneous (Null/Knockout)</td>
<td>Foxn1</td>
<td>forkhead box N1</td>
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### RESEARCH APPLICATIONS
- Dermatology Research
- Endocrine Deficiency Research
- Immunology, Inflammation and Autoimmunity Research
- Research Tools
- Internal/Organ Research

### BASE PRICE
Starting at:

$2,595.00 Domestic price Cryo Recovery

### Details

#### Detailed Description

The two main defects of mice homozygous for the nude spontaneous mutation (Foxn1<sup>nu</sup>, formerly Hh1<sup>nu</sup>) are abnormal hair growth and defective development of the thymic epithelium. Although the mice appear hairless, they are born with functional but faulty hair growth follicles. Hair growth cycles and patterns are evident especially in pigmented mice but the faulty follicles do not allow the hair to properly erupt. Homozygous pups can be identified as young as 24 hours by their lack of whiskers or poorly developed, crinkled whiskers. Nude mice are also athymic caused by a developmental failure of the thymic anlage. Consequently, homozygous nude mice lack T cells and suffer from a lack of cell-mediated immunity. However there is not a defect in T-cell precursors, and under the right conditions some functional mature T cells can be found especially in adult mice. Because of a defect in helper T-cell activity, responses to thymus-dependent antigens when detectable are primarily limited to IgM. Homozygous nude mice show partial defect in B cell development probably due to absence of functional T cells. Other endocrine and neurological deficiencies have been reported. The use of nude mice has reduced the number of thymectomy procedures required in research projects. Females are not effective breeders. Ovulation starts late at 2.5 months and ends early at 4 months.

#### Development

#### Control Suggestions

#### Selected References
Genotyping Protocols
Restriction Enzyme Digest: Foxn1
Pyrosequencing: Foxn1
End Point Analysis: Foxn1
Genotyping resources and troubleshooting

Breeding Considerations
This strain is a challenging breeder.
The immunodeficiencies of homozygous Foxn1 make them highly susceptible to disease and indigenous organisms. Consequently it is preferable to maintain them in defined-flora or pathogen-free environments. Using proper housing techniques can increase the lifespan of nude to one similar to that of normal littermates. Culling extra normal littermates may increase the survival rate of the homozygous Foxn1. However do not decrease litter size below 5 causing a potential decrease in lactation of nursing female.
Additional Breeding and Husbandry Support

Appearance
unpigmented, without hair
Related Genotype: A/A Tyrp1b/Tyrp1b Tyrb/Tyrb Foxn1+Foxn1

albino, unaffected
Related Genotype: Tyrp1b/Tyrp1b Tyrb/Tyrb Foxn1+ or Tyrp1b/Tyrp1b Tyrb/Tyrb +?

Citation
When using the nude mouse strain in a publication, please cite the originating article(s) and include JAX stock #000711 in your Materials and Methods section.
Production of mice from cryopreserved embryos or sperm occurs in a maximum barrier room, G200
### Pricing & Availability

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

<table>
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<tr>
<th>Domestic</th>
<th>International</th>
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<td>Pricing effective for USA, Canada and Mexico shipping destinations</td>
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#### Cryorecovery - Domestic Pricing

<table>
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<th>SERVICE</th>
<th>GENOTYPE</th>
<th>PRICE</th>
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<tr>
<td>Cryo Recovery</td>
<td>Heterozygous or Wild-type for Foxn1&lt;nu&gt;</td>
<td>$2,595.00</td>
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</table>

We will fulfill your order by providing at least two carriers for each strain ordered. The total number, sex, and genotypes provided will vary, although typically 8 or more animals are provided. Please check genotypes which will be recovered. While the genotypes of all animals produced will be communicated to you prior to scheduling shipment, the genotypes of animals provided may not reflect the mating scheme and genotypes described in the strain description. Animals are typically ready to ship in 11-14 weeks. If a second recovery is required to produce the minimum number of animals, then delivery time would increase to approximately 25 weeks. If we fail to produce animals of the correct genotype, you will not be charged. We cannot guarantee the reproductive success of mice shipped to your facility. If the mice are lost after the first three days (post-arrival) or do not produce progeny at your facility, a new order and fee will be necessary.

Cryorecovery to establish a Dedicated Supply for greater quantities of mice. Mice recovered can be used to establish a dedicated colony to contractually supply you mice according to your requirements. Price by quotation.

#### Payment Terms and Conditions

Terms are granted by individual review and stated on the customer invoice(s) and account statement. These transactions are payable in U.S. currency within the granted terms. Payment for services, products, shipping containers, and shipping costs that are rendered are expected within the payment terms indicated on the invoice or stated by contract. Invoices and account balances in arrears of stated terms may result in The Jackson Laboratory pursuing collection activities including but not limited to outside agencies and court filings.

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### Terms Of Use

#### Terms of Use

General Terms and Conditions

#### Licensing Information

Phone: 207-288-6470
Email: TechTran@jax.org

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### Related Strains

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