Overview

Also Known As: athymic nude

The two main defects of mice homozygous for the nude spontaneous mutation (Foxn1\textsuperscript{nu}, formerly Hfh1\textsuperscript{nu}) are abnormal hair growth and defective development of the thymic epithelium. Nude mice are also athymic; homozygous nude mice lack T cells and suffer from a lack of cell-mediated immunity. Homozygous nude mice show partial defect in B cell development.
**GENETIC OVERVIEW**

**Genetic Background**

**Generation**

**Contact Technical Support**

(2018-07-27 00:00:00)

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**RESEARCH APPLICATIONS**

Dermatology Research  
Endocrine Deficiency Research  
Immunology, Inflammation and Autoimmunity Research  
Research Tools  
Internal/Organ Research

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**BASE PRICE**

Starting at:

$47.20 Domestic price for male 3-week

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**Volume Pricing Available!**

for select shipping destinations  
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**Important Note**

This strain is segregating for Foxn1nu.

**Detailed Description**

The two main defects of mice homozygous for the nude spontaneous mutation (Foxn1nu, formerly Hfh1nu) 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. Homozygous nude females
are not effective breeders. Ovulation starts late at 2.5 months and ends early at 4 months.
Appearance
albino, without hair
Related Genotype: A/A Tyr\textsuperscript{c} Tyr\textsuperscript{c} Foxn1\textsuperscript{nu} Foxn1\textsuperscript{nu}

albino, with hair
Related Genotype: A/A Tyr\textsuperscript{c} Tyr\textsuperscript{c} Foxn1\textsuperscript{nu} +

Citation
When using the NU/J mouse strain in a publication, please include JAX stock #002019 in your Materials and Methods section.

Animal Health Reports
Facility Barrier Level Descriptions
- AX30 (Maximum)
- RB06 (Maximum)
- RB10 (Maximum)

## Pricing & Availability

Sized to accommodate orders of up to 100 or more. Ask Customer Service for details.

### Domestic vs. International

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### Volume Pricing Details

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**Volume Pricing Program**

Quantities: Volume pricing is automatically applied when a minimum quantity per strain for a shipment is reached.

Sexes: Sexes of the same strain may be combined to reach minimum quantity levels to receive the volume pricing.

Shipment: All shipping destinations qualify.

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**Terms of Use**

**General Terms and Conditions**

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All

By Allele
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Related By:  |  Featured Immunodeficient models

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Stock No: 001803
Related By:  |  Featured Immunodeficient models

**J:NU**
Stock No: 007850  |  outbred athymic nude
Related By:  |  Foxn1, Foxn1<sup>−/−</sup>, Featured Immunodeficient models