NU/J

Stock No: 002019

Inbred Strain, Spontaneous Mutation

READILY AVAILABLE

PLACE ORDER

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

Also Known As: nu/nu, athymic nude

The two main defects of mice homozygous for the nude spontaneous mutation (Foxn1

, formerly Hfh11

) 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.

READ MORE +

Genetic Background

Generation

Contact Technical Support
(2018-07-27 00:00:00)

VIEW GENETICS
Starting at:

$71.20 Domestic price for male 3-week

Volume Pricing Available!
for select shipping destinations
Click for Details

Details

Important Note
This strain is segregating for Foxn1nu.

Detailed Description

The two main defects of mice homozygous for the nude spontaneous mutation (Foxn1\textsuperscript{nu}, formerly Hfh11\textsuperscript{nu}) 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.

View Flow Cytometry Characterization Data for Immunodeficient JAX Strains

Development

Control Suggestions
Genotyping Protocols
Restriction Enzyme Digest: Foxn1^nu
End Point Analysis: Foxn1^nu
Genotyping resources and troubleshooting

Dietary Information
LabDiet® 5K52 formulation (6% fat)

Breeding Considerations
This strain is a good breeder.
Additional Breeding and Husbandry Support

Mating System
Heterozygote x Homozygote

Appearance
albino, without hair
Related Genotype: A/A Tyr^c/Tyr^c Foxn1^nu/Foxn1^nu

albino, with hair
Related Genotype: A/A Tyr^c/Tyr^c Foxn1^nu/+

Citation
Animal Health Reports
When using the NU/J mouse strain in a publication, please include JAX stock #002019 in your Materials and Methods section.
Facility Barrier Level Descriptions
### Pricing & Availability

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

#### Domestic

Pricing effective for USA, Canada and Mexico shipping destinations

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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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**FAQ**

**FAQ About Terms Of Use**

Terms of Use

General Terms and Conditions

Licensing Information

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

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- By Allele
- By Gene
- By Collection