FVB-Tg(KRT14-Vegfa)3Dtm/J

Stock No: 005705 | K14-VEGF

- Coisogenic, Transgenic

**CRYO RECOVERY**

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

Also Known As: K14-VEGF

These K14-VEGF mice express a transgene containing a keratin 14 promoter-controlled 164-amino acid Vegfa splice variant and homozygotes develop severe psoriasis-like lesions.

**Donating Investigator**

Michael Delmar, Swiss Fed Institute of Tech (ETH) Zurich

**GENETIC OVERVIEW**

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
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<tr>
<td>Tg(KRT14-Vegfa)3Dtm</td>
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**Allele Type**

Transgenic (Inserted expressed sequence)

**RESEARCH APPLICATIONS**

- Immunology, Inflammation and Autoimmunity Research
- Cancer Research
- Internal/Organ Research
- Dermatology Research
- Research Tools

**VIEW GENETICS**

**VIEW ALL RESEARCH APPLICATIONS**

**BASE PRICE**
Details

Detailed Description
Mice hemizygous for the transgene are viable and fertile. Transgene expression is demonstrated in the basal keratinocyte layer of the epidermis and outer root sheath keratinocytes of hair follicles. Homozygous mice spontaneously develop severe psoriasis-like lesions between 3-6 months of age, where hemizygous mice do not. Transgenic mice have increased density of tortuous cutaneous blood capillaries with elevated expression of select VEGF receptors, most prominently in neonates. Dermal mast cell localization and capillary hyperpermeability are also increased. Postcapillary venules exhibit significantly enhanced leukocyte rolling and adhesion. Transgenic expression promotes lymphangiogenesis associated not only with delayed-type hypersensitivity induced psoriasis-like skin inflammation but also with cutaneous tissue repair after wounding. Further, transgenic mice have accelerated chemically induced skin carcinogenesis with tumor associated lymphangiogenesis and angiogenesis. Elevated metastasis to sentinel and distal lymph nodes and organs is observed. Depilated transgenic mice have accelerated hair regrowth compared to wildtype. Mice expressing this transgene may be useful in studying psoriasis, contact dermatitis, rheumatoid arthritis, lymphangiogenesis, cancer, or hair growth.

Development

Expression Data

Control Suggestions

Selected References

Genetics

Tg(KRT14-Vegfa)3Dtm

Disease/Phenotype

Disease Terms

Research Areas By Genotype

Mammalian Phenotype Terms by Genotype

References

Technical Support
Genotyping Protocols
Standard PCR: Tg(KRT14-Vegfa)3Dtm
Genotyping resources and troubleshooting

Breeding Considerations
When maintaining a live colony, these mice are maintained as homozygotes.
Additional Breeding and Husbandry Support

Mating System
+/+ sibling x Hemizygote

Citation
When using the KRT-HERF mouse strain in a publication, please cite the originating article(s) and include JAX stock #005705 in your Materials and Methods section.
Facility Barrier Level Descriptions
Production of mice from cryopreserved embryos or sperm occurs in a maximum barrier room, G200

Priming & Availability

![Cryo Recovery](image)
Typically mice are recovered in 10-14 weeks. Contact Customer Service to place an order or for more information.

<table>
<thead>
<tr>
<th>SERVICE</th>
<th>GENOTYPE</th>
<th>PRICE</th>
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<tbody>
<tr>
<td>Cryo Recovery</td>
<td>Hemizygous or Non carrier for Tg(KRT14-Vegfa)3Dtm</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 your mice according to your requirements. Price by quotation.

Related Products and Services

<table>
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<tr>
<th>PRODUCT</th>
<th>PRICE</th>
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<tr>
<td>Frozen Mouse Embryo</td>
<td>$2,595.00 per straw or vial</td>
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</table>
Payment Terms and Conditions
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Terms Of Use

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Email: TechTran@jax.org

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