This colony is currently unavailable and we are unable to determine when it will be distributed in the future. As we have more information, we will provide updates here.

The wild-derived inbred strain SPRET/Ei is often used in crosses with common inbred strains to create highly polymorphic panels for genetic mapping. SPRET/Ei may be useful for studies relating to inflammatory disorders.

**GENETIC OVERVIEW**

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
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<td>F106</td>
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**RESEARCH APPLICATIONS**

- Immunology, Inflammation and Autoimmunity Research
- Research Tools
- Reproductive Biology Research
- Metabolism Research

The wild-derived inbred strain SPRET/Ei is often used in crosses with common inbred strains to create highly polymorphic panels for genetic mapping. SPRET/Ei may be useful for studies relating to inflammatory disorders.
panels for genetic mapping. SPRET/Ei mice are resistant to high doses of tumor necrosis factor alpha (TNFa) (Staelens et al 2002). Mice from a C57BL/6 x SPRET/Ei F1 cross were protected from TNFa-induced arthritis and partially protected against induced allergic asthma (Staelens et al 2004). SPRET/Ei may be useful in understanding certain inflammatory diseases.

In 2019-2020, researchers at The Jackson Laboratory discovered this inbred strain contains the Trem2$^{S148E}$ allele - a naturally occurring variant at position 48351151-48351152 on Chr 17 (rs108080490 and rs107649577; Ensembl GRCm38.p6). This TC to GA transition results in a serine to glutamic acid substitution at amino acid 148 (S148E).
Dietary Information
LabDiet® 5K20 formulation (10% fat)

Breeding Considerations

Subsequent to a severe breeding slump in 2015 this strain was moved onto grain with 10% fat and has performed much better.

Additional Breeding and Husbandry Support
Mating System
Sibling x Sibling
Appearance
white-bellied agouti
Related Genotype: $A^w/A^w$

Citation
When using the SPRET/EiJ mouse strain in a publication, please include JAX stock #001146 in your Materials and Methods section.

Animal Health Reports
Facility Barrier Level Descriptions

- MGL273 (Low)

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**STRAIN INTEREST REGISTRATION**

Please fill out the form below to indicate your interest in purchasing this JAX®Mice strain. This information helps us manage the colony build and better meet the broad needs of the research community.

Please send any technical questions to Technical Support.

Contact Information

First Name

Last Name

Institution

Phone Number

Email

Interest

Please indicate your approximate levels of interest. You can add another line by selecting "Add More Interest".

Number of Mice

Frequency

Product
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