

## B6By.Cg-Sox18<sup>Ra</sup> Pt Os/J

Stock No: 000125

Chemically Induced Mutation, Congenic, Radiation Induced Mutation, Spontaneous Mutation

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

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developmentally retarded sinus hair growth apparent at embryonic day 16.5 and retarded development of pelage follicles apparent by embryonic day 17.5. Thus, heterozygotes have slightly shorter vibrissae evident at birth, and can be distinguished at three days of age by their pink skin which, due to the abnormally sparse development of the coat, fails to darken like that of wildtype siblings. A paucity of fur is apparent by nine days of age and persists throughout life. Compared with the wild type pelage, Sox18<sup>Ra</sup>/+ coats have longer g...

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## GENETIC OVERVIEW

### Genetic Background

### Generation

### Sox18<sup>Ra</sup>

#### Alele Type

Spontaneous

#### Gene Symbol

Sox18

#### Gene Name

SRY (sex determining region Y)-box 18

### Os

#### Alele Type

Radiation induced

#### Gene Symbol

Os

#### Gene Name

oligosyndactylism

### Pt

#### Alele Type

Chemically induced (other)

#### Gene Symbol

Pt

#### Gene Name

pintail

VIEW GENETICS

## RESEARCH APPLICATIONS

Developmental Biology Research  
Internal/Organ Research  
Dermatology Research

[VIEW ALL RESEARCH APPLICATIONS](#)

## BASE PRICE

Starting at:

\$2,854.50 Domestic price Cryo Recovery

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### [Details](#)

#### [Detailed Description](#)

The  $Sox18^{Ra}$  and  $Sox18^{Ra-J}$  alleles cause a less severe phenotype than the  $Sox18^{Ra-Op}$  allele. The  $Sox18^{Ra}$  and  $Sox18^{Ra-J}$  alleles are similar mutations and give a very similar phenotype. The  $Sox18^{Ra}$  allele has been more broadly described in the literature and will be covered here. Heterozygotes are viable and fertile. Heterozygotes have developmentally retarded sinus hair growth apparent at embryonic day 16.5 and retarded development of pelage follicles apparent by embryonic day 17.5. Thus, heterozygotes have slightly shorter vibrissae evident at birth, and can be distinguished at three days of age by their pink skin which, due to the abnormally sparse development of the coat, fails to darken like that of wildtype siblings. A paucity of fur is apparent by nine days of age and persists throughout life. Compared with the wild type pelage,  $Sox18^{Ra}/+$  coats have longer guard hairs, shorter awls and zigzags, an increased number of guard hairs and awls, fewer zigzags, and no auchenes. There are mild morphological abnormalities in the hairs. There is no decrease in the number of hair follicles, but many of the follicles fail to grow hair. There is decreased yellow pigment in the hair causing the thin coat that develops to be darker than normal particularly in the dorsal midline. Subsequent to the first wave, hair growth is asynchronous and the normal cyclic fluctuations in skin thickness are not found. The adipose layer of the skin is thinner than normal. Despite this asynchrony of adjacent hair follicles, hair cycles do occur across the pelage, but are more diffuse than normal. The hair follicles have an aberrant shape and orientation. This aberrancy is more pronounced in homozygotes. The impact of the  $Sox18^{Ra}$  mutation on hair is more pronounced in the anterior regions than in the posterior regions. Approximately one in ten heterozygous pups displays chylous ascites, and the most severely affected do not survive. This trait is seen in males more than in females and is modified by genetic background. (Carter and Phillips, 1954; Slee, 1956 and 1957; Mann, 1963; Herbertson and Wallace, 1964; Wallace, 1979.)

Homozygotes are nearly bald, lack vibrissae, and usually die before weaning. They have generalized edema and weigh more at birth than wildtype littermates. It has been estimated that 40% of homozygotes die as embryos. The homozygotes that survive are often 5-10% shorter in body length. There are fewer hair follicles than normal and the few hairs that do grow have abnormal morphology. There is pigment in the tail and ear pinnae, and the ear pinnae are thinner than normal and are often wrinkled. (Carter and Phillips, 1954; Slee, 1956 and 1957; Mann 1963.)

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## ⊖ Genetics

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+ [Sox18<sup>Ra</sup>](#)

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+ [Os](#)

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+ [Pt](#)

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## ⊖ Disease/Phenotype

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+ [Disease Terms](#)

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+ [Research Areas By Phenotype](#)

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+ [Mammalian Phenotype Terms by Genotype](#)

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+ [References](#)

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## ⊖ Technical Support

C O N T A C T   T E C H N I C A L   S U P P O R T

### Genotyping Protocols

[Genotyping resources and troubleshooting](#)

### Citation

When using the B6By.Cg-*Sox18<sup>Ra</sup>* *Pt* Os/J mouse strain in a publication, please [cite the originating article\(s\)](#) and include JAX stock #000125 in your Materials and Methods section.

### Animal Health Reports

[Facility Barrier Level Descriptions](#)

*Production of mice from cryopreserved embryos or sperm occurs in a maximum barrier room, [G200](#)*

## ➔ Pricing & Availability



Cryo  
Recovery

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

### Domestic | International

Pricing effective for USA, Canada and Mexico shipping destinations

#### CRYORECOVERY - DOMESTIC PRICING

SERVICE/PRODUCT	DESCRIPTION	PRICE
Cryo Recovery	Heterozygous or Wild-type for Sox18<Ra>, Heterozygous or Wild-type for Pt and Heterozygous or Wild-type for Os	\$2,854.50

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