

# Resource Summary Report

Generated by [RRID](#) on Jul 29, 2026

## B6.Cg-F2rl1<sup>tm1Mslb</sup>/J

RRID:IMSR\_JAX:004993

Type: Organism

### Proper Citation

RRID:IMSR\_JAX:004993

### Organism Information

**URL:** <https://www.jax.org/strain/004993>

**Proper Citation:** RRID:IMSR\_JAX:004993

**Description:** Mus musculus with name B6.Cg-F2rl1<sup>tm1Mslb</sup>/J from IMSR.

**Species:** Mus musculus

**Synonyms:** B6.Cg-F2rl1/J. PAR2ko

**Notes:** gene symbol note: F2R like trypsin receptor 1; mutant strain|congenic strain: F2rl1

**Affected Gene:** F2R like trypsin receptor 1

**Genomic Alteration:** targeted mutation 1; Mary Stevens

**Catalog Number:** JAX:004993

**Database:** JAX Mice and Services

**Database Abbreviation:** JAX

**Availability:** live

**Organism Name:** B6.Cg-F2rl1<sup>tm1Mslb</sup>/J

**Record Creation Time:** 20250513T053647+0000

**Record Last Update:** 20260725T044357+0000

### Ratings and Alerts

No rating or validation information has been found for B6.Cg-F2rl1<sup>tm1Mslb</sup>/J.

No alerts have been found for B6.Cg-F2rl1<sup>tm1Mslb</sup>/J.

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## Data and Source Information

**Source:** [Integrated Animals](#)

**Source Database:** JAX Mice and Services

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## Usage and Citation Metrics

We found 18 mentions in open access literature.

**Listed below are recent publications.** The full list is available at [RRID](#) .

Meyer U, et al. (2025) Significance of FXa and its receptor PAR2 for the growth of colon cancer cells in vitro and in vivo. *Frontiers in oncology*, 15, 1631350.

Lakemeyer M, et al. (2025) A *Bacteroides fragilis* protease activates host PAR2 to induce intestinal pain and inflammation. *Cell host & microbe*.

Liu Z, et al. (2025) PAR2 deficiency impairs antitumor immunity and attenuates anti-PD1 efficacy in colorectal cancer. *Pharmacological research*, 215, 107721.

Scheff NN, et al. (2022) Oral cancer induced TRPV1 sensitization is mediated by PAR2 signaling in primary afferent neurons innervating the cancer microenvironment. *Scientific reports*, 12(1), 4121.

Reches G, et al. (2022) Resolving the conflicts around Par2 opposing roles in regeneration by comparing immune-mediated and toxic-induced injuries. *Inflammation and regeneration*, 42(1), 52.

Ha S, et al. (2022) Activation of PAR2 promotes high-fat diet-induced renal injury by inducing oxidative stress and inflammation. *Biochimica et biophysica acta. Molecular basis of disease*, 1868(10), 166474.

Bang E, et al. (2021) Protease-activated receptor 2 induces ROS-mediated inflammation through Akt-mediated NF- $\kappa$ B and FoxO6 modulation during skin photoaging. *Redox biology*, 44, 102022.

Park YJ, et al. (2021) PAR2 Deficiency Induces Mitochondrial ROS Generation and Dysfunctions, Leading to the Inhibition of Adipocyte Differentiation. *Oxidative medicine and cellular longevity*, 2021, 6683033.

Kim DH, et al. (2021) Mechanism of Lipid Accumulation through PAR2 Signaling in Diabetic Male Mice. *Endocrinology and metabolism (Seoul, Korea)*, 36(1), 171.

Kim BM, et al. (2021) PAR2 promotes high-fat diet-induced hepatic steatosis by inhibiting AMPK-mediated autophagy. *The Journal of nutritional biochemistry*, 95, 108769.

Kim DH, et al. (2019) FoxO6-mediated IL-1 $\beta$  induces hepatic insulin resistance and age-related inflammation via the TF/PAR2 pathway in aging and diabetic mice. *Redox biology*, 24, 101184.

He L, et al. (2018) Protease-activated receptor 2 signaling modulates susceptibility of colonic epithelium to injury through stabilization of YAP in vivo. *Cell death & disease*, 9(10), 949.

Yoon H, et al. (2017) Protease activated receptor 2 controls myelin development, resiliency and repair. *Glia*, 65(12), 2070.

Piran R, et al. (2016) PAR2 regulates regeneration, transdifferentiation, and death. *Cell death & disease*, 7(11), e2452.

Post S, et al. (2014) Protease-activated receptor-2 activation contributes to house dust mite-induced IgE responses in mice. *PloS one*, 9(3), e91206.

Hennessey JC, et al. (2013) Attenuated vasodilator effectiveness of protease-activated receptor 2 agonist in heterozygous par2 knockout mice. *PloS one*, 8(2), e55965.

Chia E, et al. (2011) Protection of protease-activated receptor 2 mediated vasodilatation against angiotensin II-induced vascular dysfunction in mice. *BMC pharmacology*, 11, 10.

McGuire JJ, et al. (2008) Blood pressures, heart rate and locomotor activity during salt loading and angiotensin II infusion in protease-activated receptor 2 (PAR2) knockout mice. *BMC physiology*, 8, 20.