

Resource Summary Report

Generated by [Kravitz](#) on Sep 20, 2026

B6.Cg-Tg(K18-ACE2)2PrImn/J

RRID:IMSR_JAX:034860

Type: Organism

Proper Citation

RRID:IMSR_JAX:034860

Organism Information

URL: <https://www.jax.org/strain/034860>

Proper Citation: RRID:IMSR_JAX:034860

Description: Mus musculus with name B6.Cg-Tg(K18-ACE2)2PrImn/J from IMSR.

Species: Mus musculus

Notes: gene symbol note: transgene insertion 2; Stanley Perlman; mutant strain|congenic strain: Tg(K18-ACE2)2PrImn

Affected Gene: transgene insertion 2; Stanley Perlman

Genomic Alteration: transgene insertion 2; Stanley Perlman

Catalog Number: JAX:034860

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

Organism Name: B6.Cg-Tg(K18-ACE2)2PrImn/J

Record Creation Time: 20250513T053846+0000

Record Last Update: 20260919T055029+0000

Ratings and Alerts

No rating or validation information has been found for B6.Cg-Tg(K18-ACE2)2PrImn/J.

No alerts have been found for B6.Cg-Tg(K18-ACE2)2PrImn/J.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 173 mentions in open access literature.

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

Wang J, et al. (2026) Redirection of SARS-CoV-2 to phagocytes by intranasal sACE2-Fc as a universal decoy confers complete prophylactic protection. *eLife*, 14.

Pasquero S, et al. (2026) Targeting peptidyl-arginine deiminase 4 suppresses SARS-CoV-2 replication and modulates the inflammatory response. *iScience*, 29(3), 115038.

Botta D, et al. (2026) Intranasal immunization with live-attenuated RSV-vectored SARS-CoV-2 vaccines elicits antigen-specific systemic and mucosal immunity and protects against viral challenge and natural infection. *bioRxiv : the preprint server for biology*.

Morosan S, et al. (2026) Opposing Association of Lung Neutrophils and PD-L1+ Monocytes in Age-Related Severity of SARS-CoV-2 Infection. *Aging cell*, 25(6), e70588.

Rao Y, et al. (2025) Targeting CTP synthetase 1 to restore interferon induction and impede nucleotide synthesis in SARS-CoV-2 infection. *mBio*, 16(6), e0064925.

Hirsch AH, et al. (2025) Heterologous prime-pull mucosal vaccination with an adjuvanted RBD vaccine elicits robust IgA production and protects against SARS-CoV-2. *Frontiers in immunology*, 16, 1673460.

Kong W, et al. (2025) Neuroendocrine cells orchestrate regeneration through Desert hedgehog signaling. *Cell*, 188(18), 5020.

Schendel SL, et al. (2025) A global collaboration for systematic analysis of broad-ranging antibodies against the SARS-CoV-2 spike protein. *Cell reports*, 44(4), 115499.

Olmedillas E, et al. (2025) Structure of a SARS-CoV-2 spike S2 subunit in a pre-fusion, open conformation. *Cell reports*, 44(8), 116052.

Liu H, et al. (2025) Severe Acute Respiratory Syndrome Coronavirus 2 Variant Infection Dynamics and Pathogenesis in Transgenic K18-hACE2 and Inbred Immunocompetent C57BL/6J Mice. *Viruses*, 17(4).

Slamanig S, et al. (2025) A single immunization with intranasal Newcastle disease virus (NDV)-based XBB.1.5 variant vaccine reduces disease and transmission in animals against matched-variant challenge. *Vaccine*, 45, 126586.

Lear TB, et al. (2025) Inhibition of virally induced TFEB proteasomal degradation as a host-centric therapeutic approach for coronaviral infection. *Science advances*, 11(23),

eadv4033.

Rao VN, et al. (2025) Clonotype-enriched somatic hypermutations drive affinity maturation of a public human antibody targeting an occluded sarbecovirus epitope. *Cell reports*, 44(8), 116122.

Gerzanich V, et al. (2025) COVID-19-associated neuroinflammation and astrocyte death in the brain linked to ORF3a-induced activation of Sur1-mediated ion channels. *mBio*, 16(9), e0201225.

Almubarak HF, et al. (2025) Integrated antibody language model accelerates IgG screening and design for broad-spectrum antiviral therapy. *iScience*, 28(10), 113584.

Rong Z, et al. (2024) Persistence of spike protein at the skull-meninges-brain axis may contribute to the neurological sequelae of COVID-19. *Cell host & microbe*, 32(12), 2112.

Liu H, et al. (2024) Establishment and characterization of an hACE2/hTMPRSS2 knock-in mouse model to study SARS-CoV-2. *Frontiers in immunology*, 15, 1428711.

Fernández JJ, et al. (2024) The IRE1 α -XBP1 arm of the unfolded protein response is a host factor activated in SARS-CoV-2 infection. *Biochimica et biophysica acta. Molecular basis of disease*, 1870(5), 167193.

Martinez DR, et al. (2024) The oral nucleoside prodrug GS-5245 is efficacious against SARS-CoV-2 and other endemic, epidemic, and enzootic coronaviruses. *Science translational medicine*, 16(748), eadj4504.

Monu M, et al. (2024) SARS-CoV-2 infects cells lining the blood-retinal barrier and induces a hyperinflammatory immune response in the retina via systemic exposure. *PLoS pathogens*, 20(4), e1012156.