

CAG-hACE2-IRES-Luc-Tg

Nomenclature	C57BL/6Smoc-Tgtn(CAG-human ACE2-IRES-Luciferase-WPRE-polyA)Smoc
Cat. NO.	NM-TG-200002
Strain State	Repository Live

Gene Summary

Gene Symbol	Synonyms	ACEH
	NCBI ID	59272
	MGI ID	Null
	Ensembl ID	ENSG00000130234
	Human Ortholog	ACE2

Model Description

The transgene is composed of a CAG-human ACE2-IRES-Luciferase-WPRE-polyA expression cassette under the control of CAG promoter.

Research Application: corona virus related research

*Literature published using this strain should indicate: CAG-hACE2-IRES-Luc-Tg mice (Cat. NO. NM-TG-200002) were purchased from Shanghai Model Organisms Center, Inc..

Validation Data

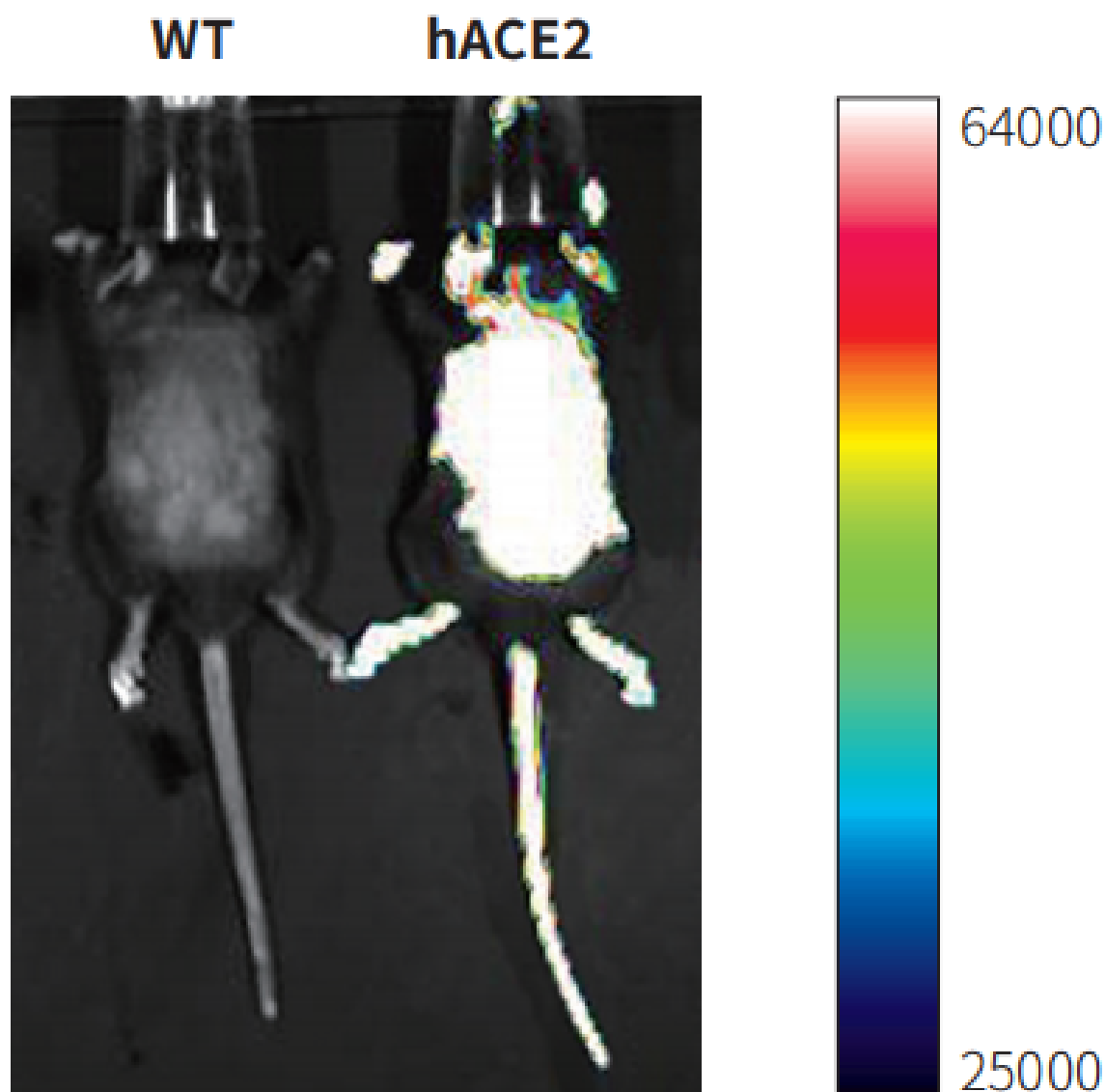


Figure 1. □Luciferase expression of the CAG-hACE2-IRES-Luciferase transgenic mice.

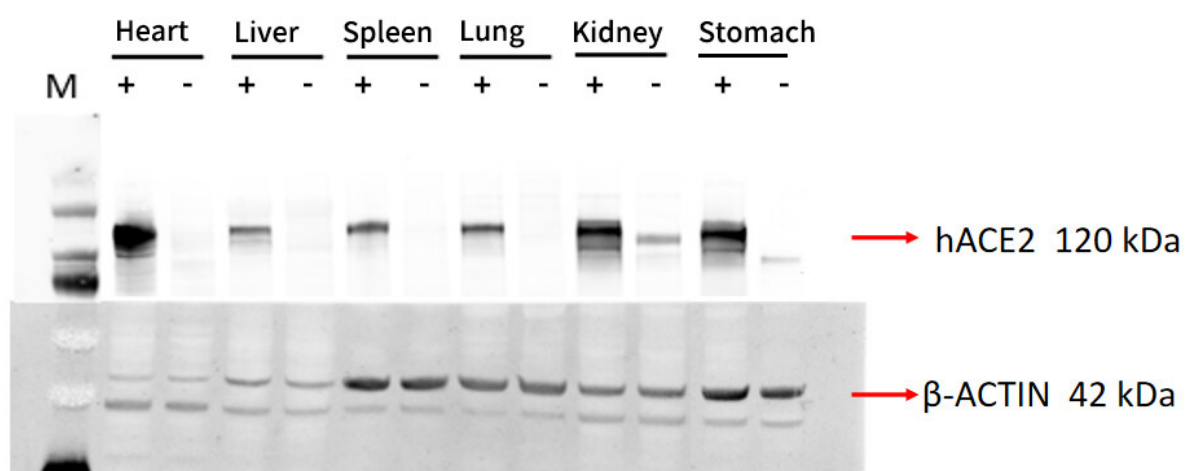


Figure 2. Western blot analysis of ACE2 protein from the CAG-hACE2-IRES-Luciferase transgenic mice.

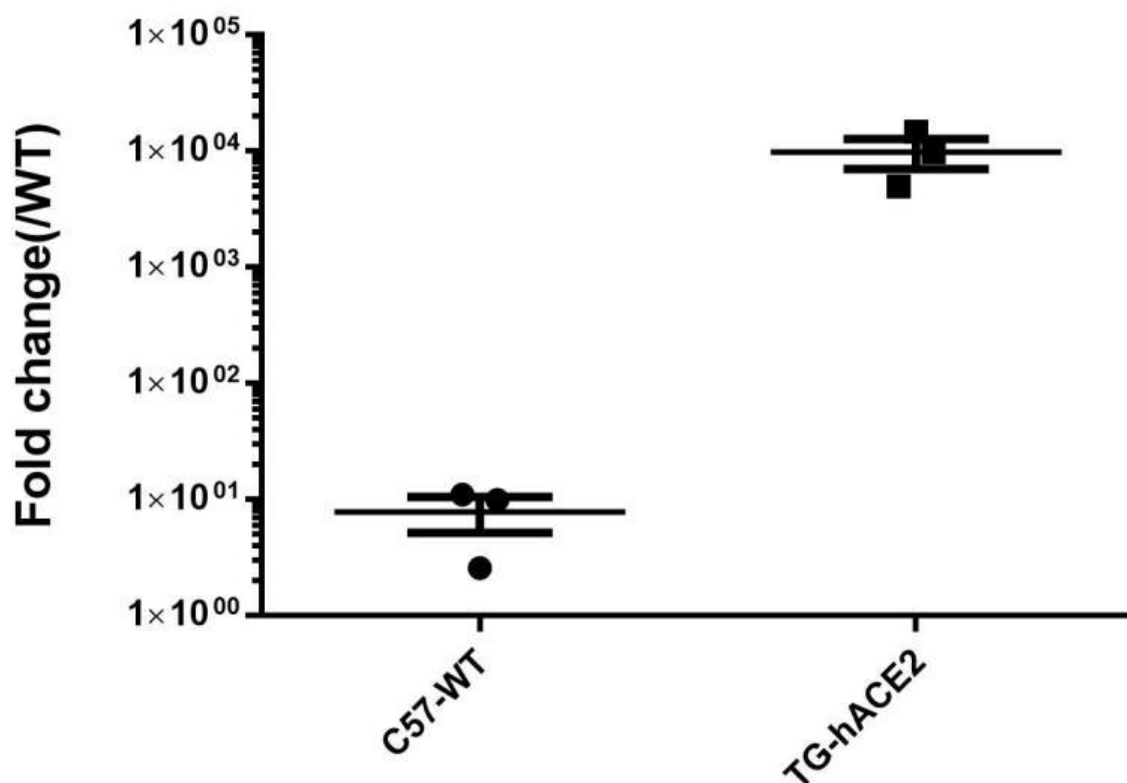


Figure 3. Virus titers in the lungs of hACE2 Tg mice after SARS-CoV-2 infection. Groups of hACE2 Tg mice and wild type mice were inoculated with the same dose of SARS-CoV-2, the result shows that hACE2 Tg mice were highly susceptible to SARS-CoV-2 infection.

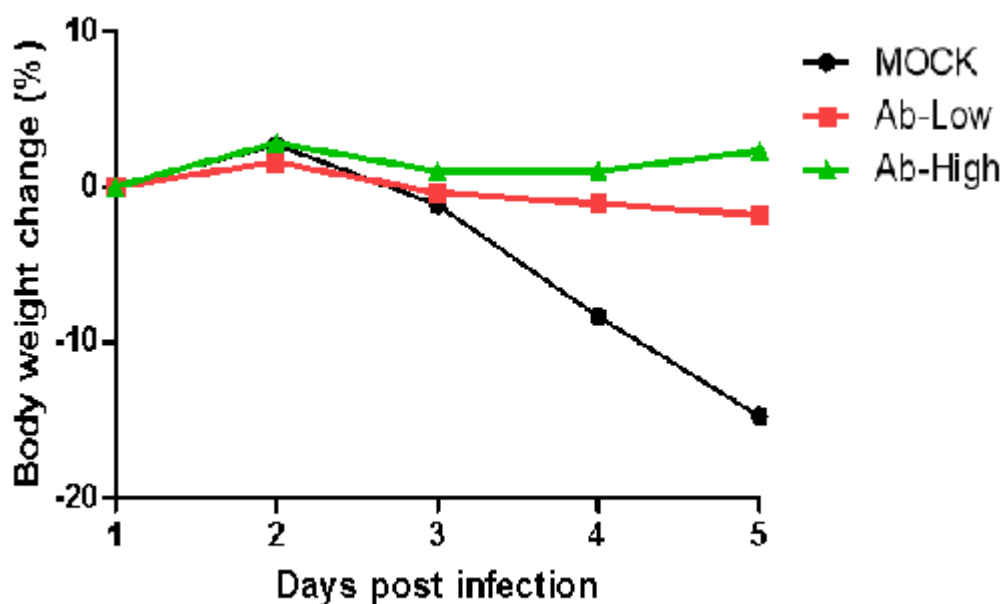


Figure 4. Body weight change in hACE2 Tg mice after drug treatment.

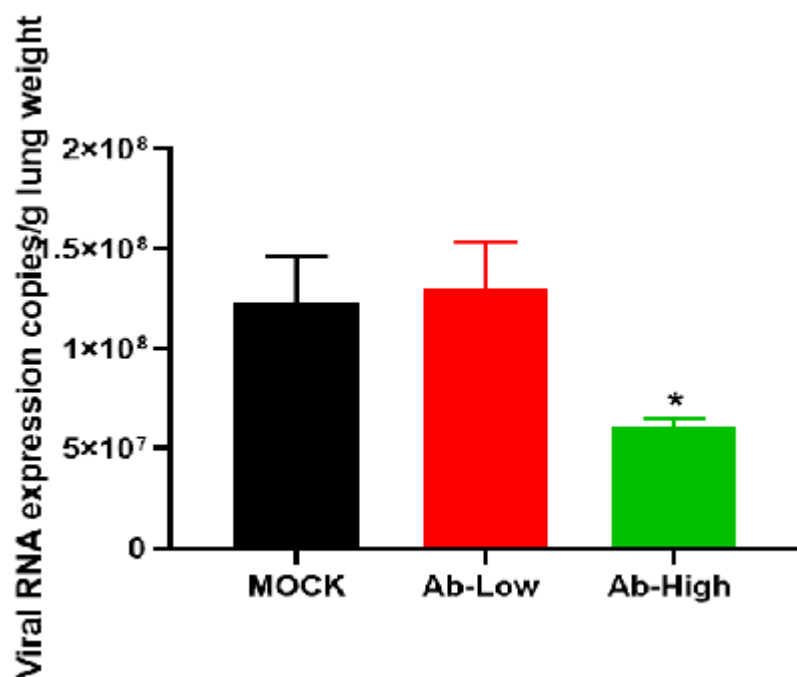


Figure 5. The viral load in the lung tissues of hACE2 Tg mice after drug treatment.

Publications

[SARS-CoV-2 might transmit through the skin while the skin barrier function could be the mediator](#)

References: MED HYPOTHESES

[hACE2 Fc-neutralization antibody cocktail provides synergistic protection against SARS-CoV-2 and its spike RBD variants](#)

References: cell discovery