

# CAG-hACE2-IRES-Luc-Tg

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

## Gene Summary

<b>Gene Symbol</b>	<b>Synonyms</b>	ACEH
	<b>NCBI ID</b>	<a href="#">59272</a>
	<b>MGI ID</b>	<a href="#">Null</a>
	<b>Ensembl ID</b>	<a href="#">ENSG00000130234</a>
	<b>Human Ortholog</b>	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

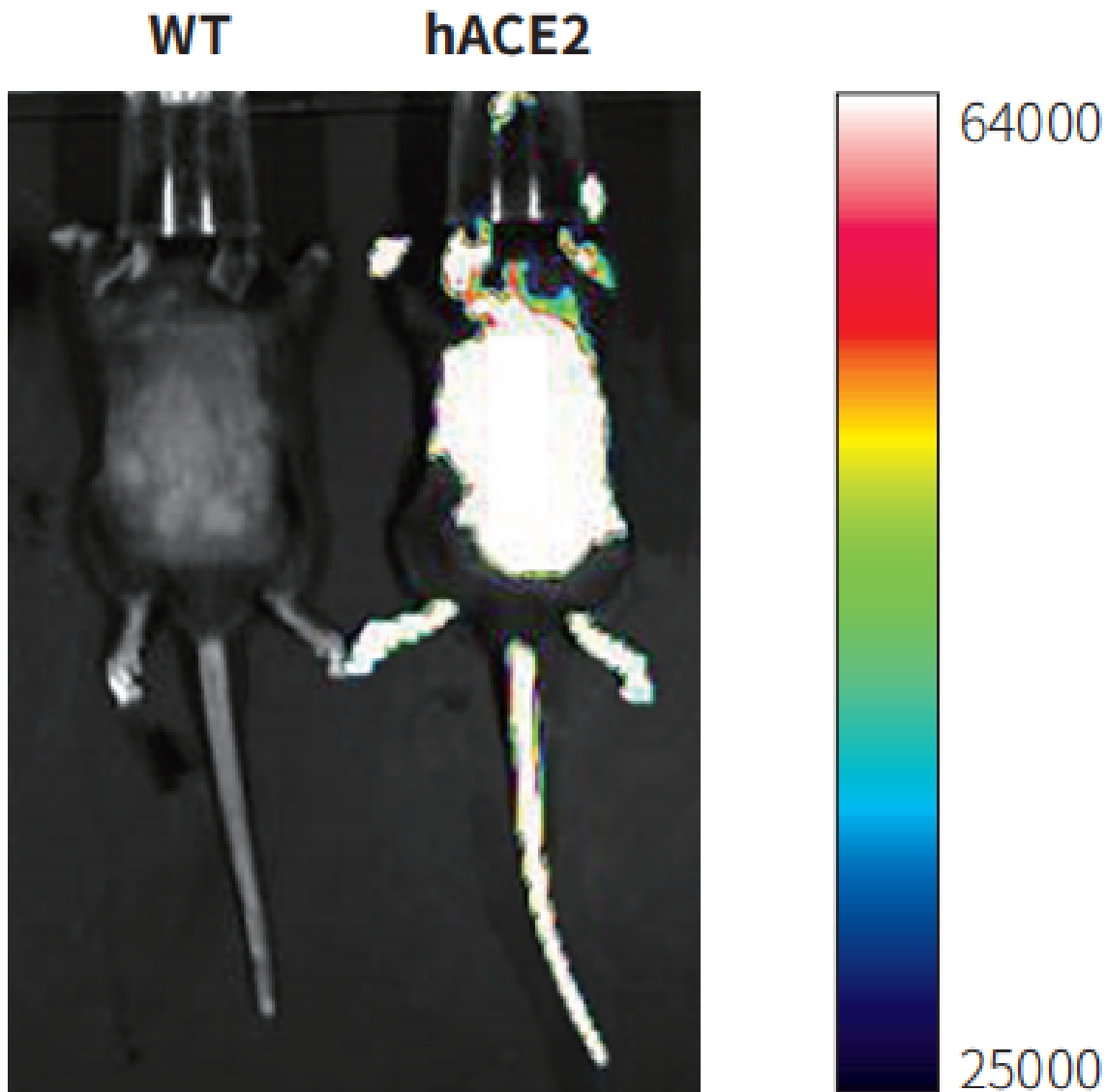


Figure 1. Bioluminescence expression of the CAG-hACE2-IRES-Luciferase transgenic mice.

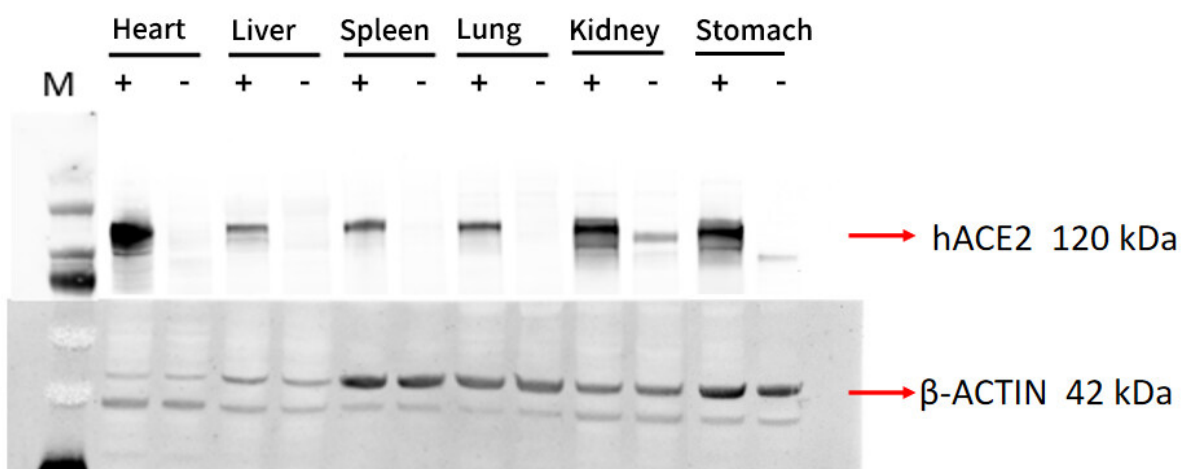


Figure 2. Western blot analysis of ACE2 protein from the CAG-hACE2-IRES-Luciferase transgenic mice.

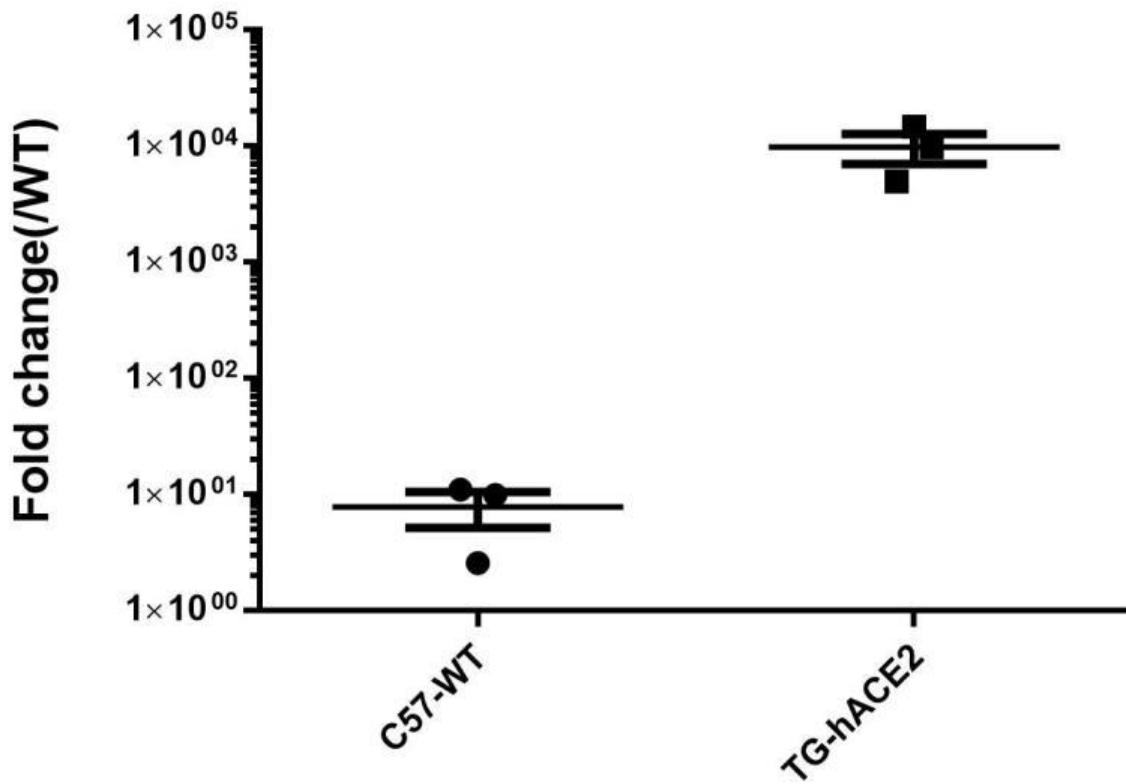


Figure 3. Virus titers in the lungs of hACE2 Tg mice after SARS-CoV-2 infection. Groups of hACE2 Tg mice and wild type mice were inoculated with the same dose of SARS-CoV-2, the result shows that hACE2 Tg mice were highly susceptible to SARS-CoV-2 infection.

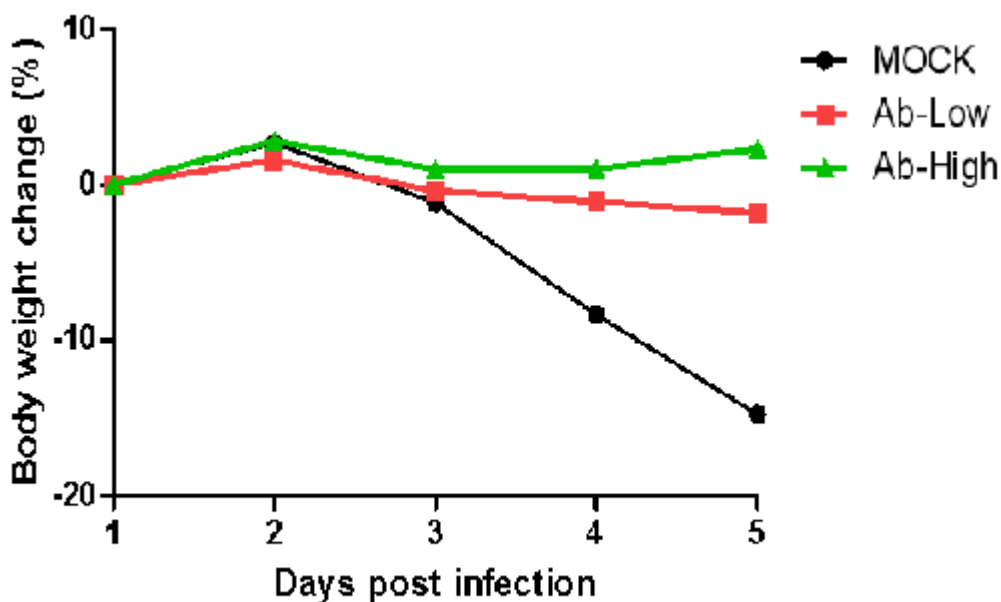


Figure 4. Body weight change in hACE2 Tg mice after drug treatment.

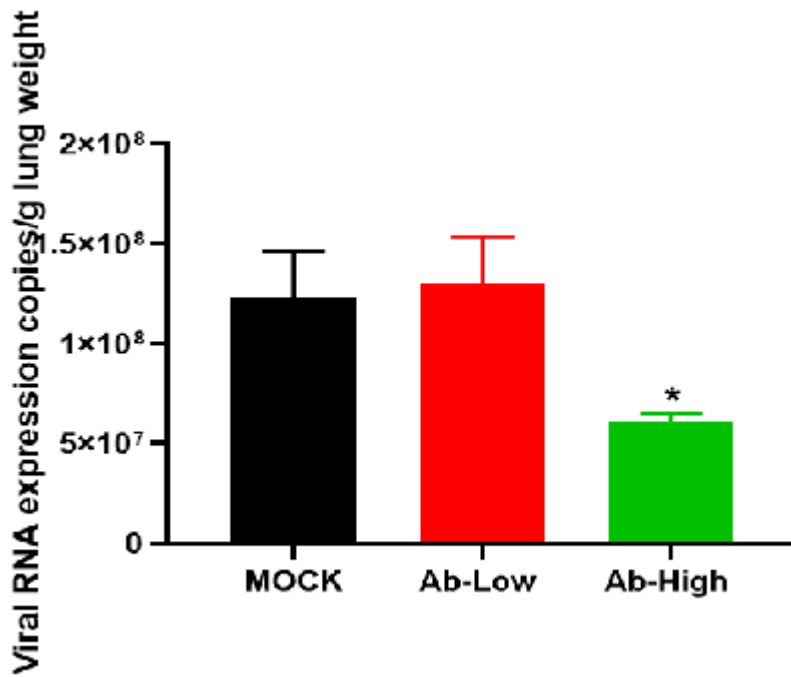


Figure 5. The viral load in the lung tissues of hACE2 Tg mice after drug treatment.

## 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