

# 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

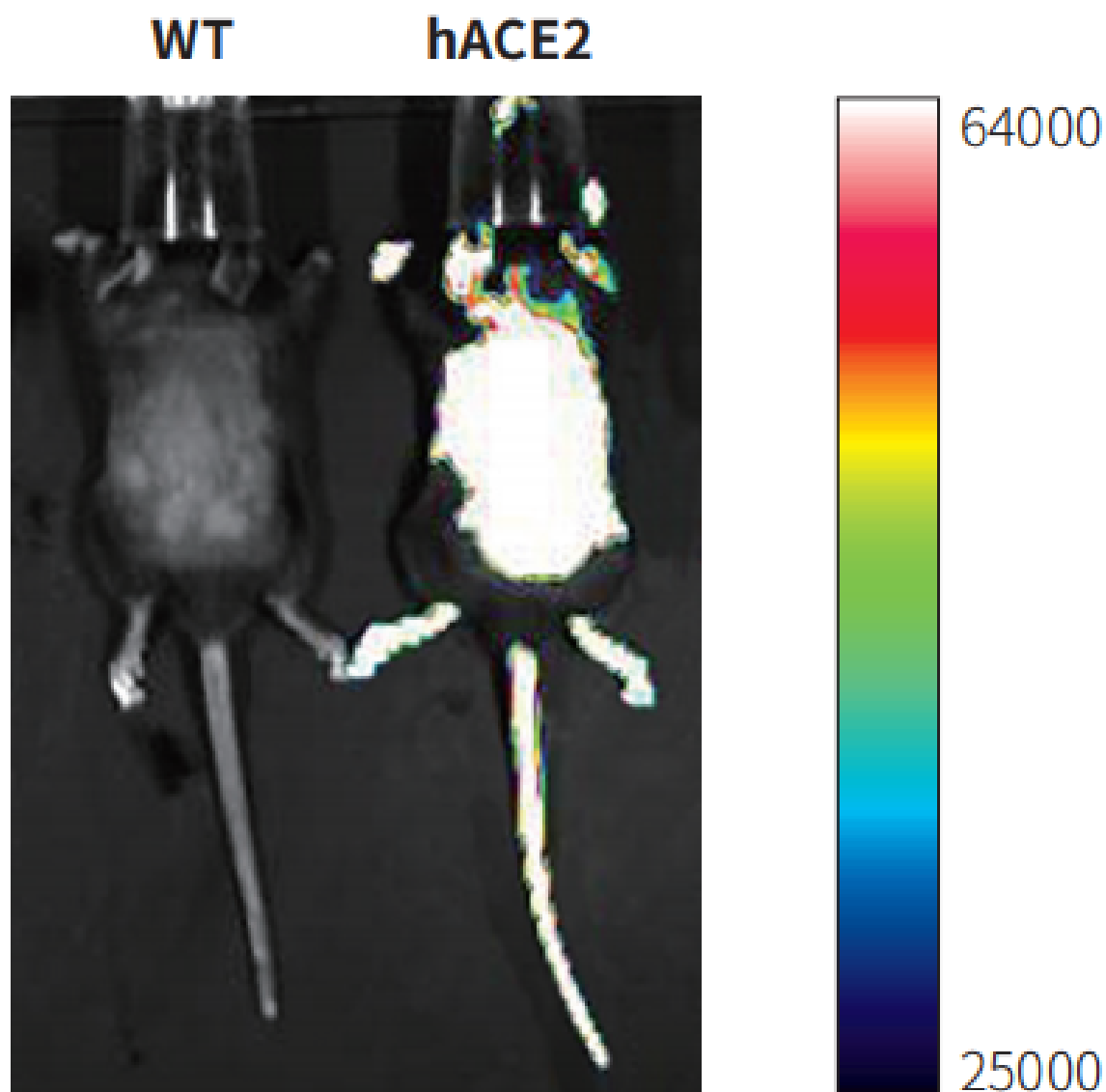


Figure 1. □Luciferase expression of the CAG-hACE2-IRES-Luciferase transgenic mice.

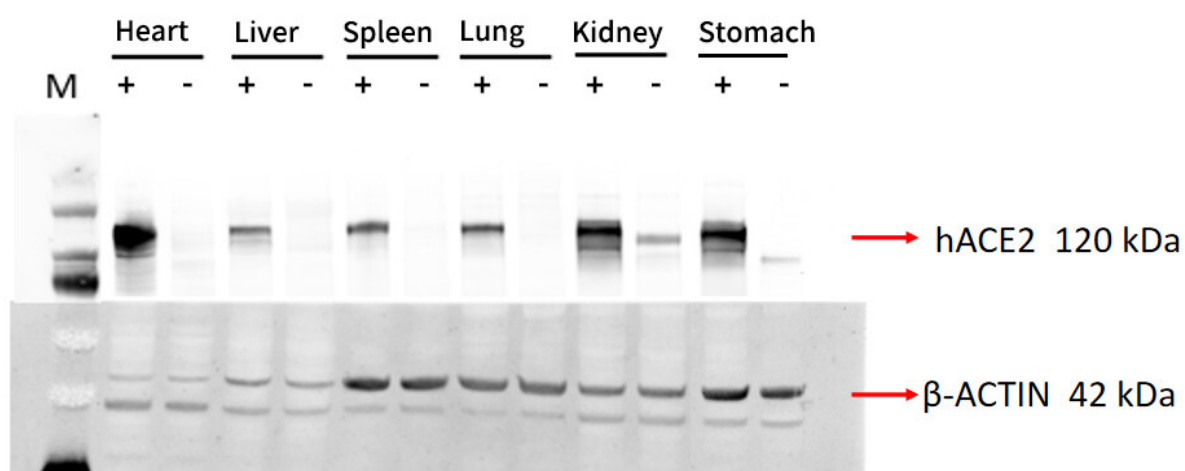


Figure 2. Western blot analysis of ACE2 protein from the CAG-hACE2-IRES-Luciferase transgenic mice.

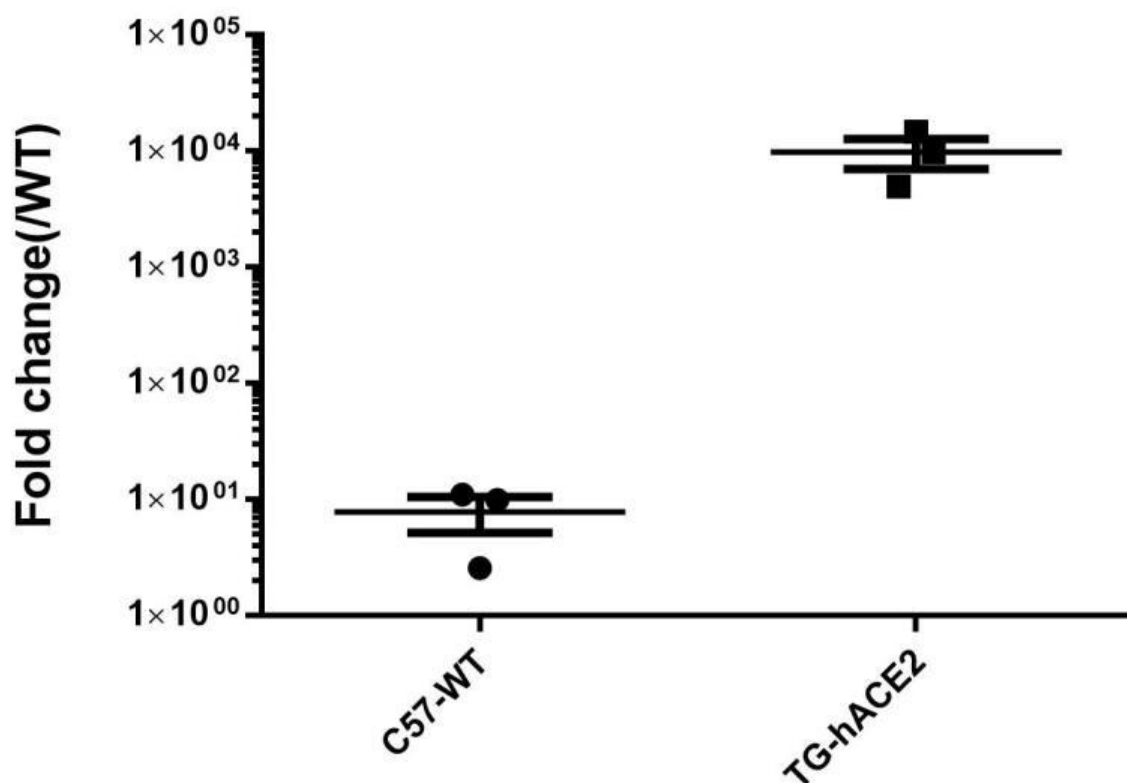


Figure 3. Virus titers in the lungs of hACE2 Tg mice after SARS-CoV-2 infection. Groups of hACE2 Tg mice and wild type mice were inoculated with the same dose of SARS-CoV-2, the result shows that hACE2 Tg mice were highly susceptible to SARS-CoV-2 infection.

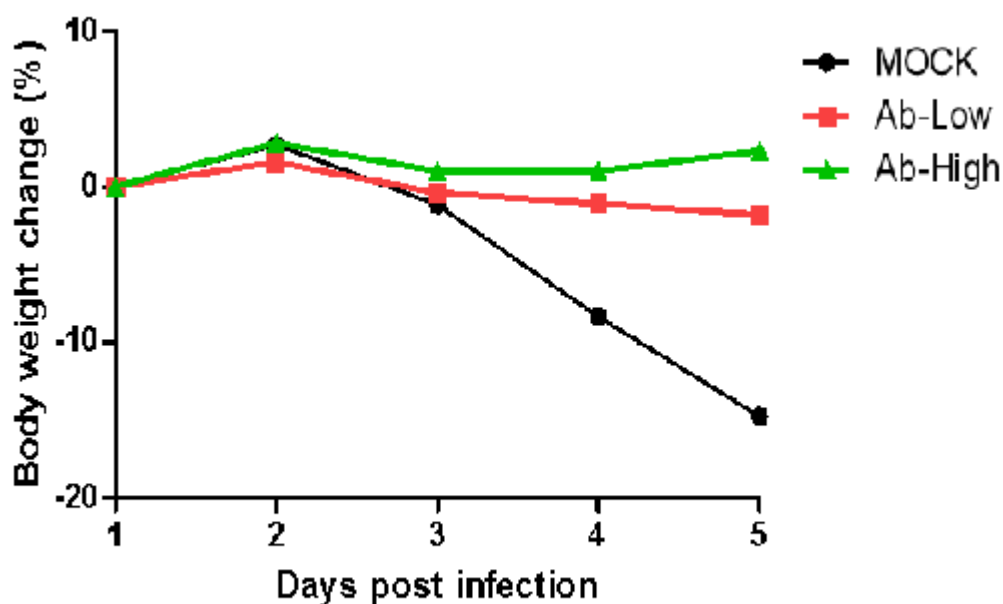


Figure 4. Body weight change in hACE2 Tg mice after drug treatment.

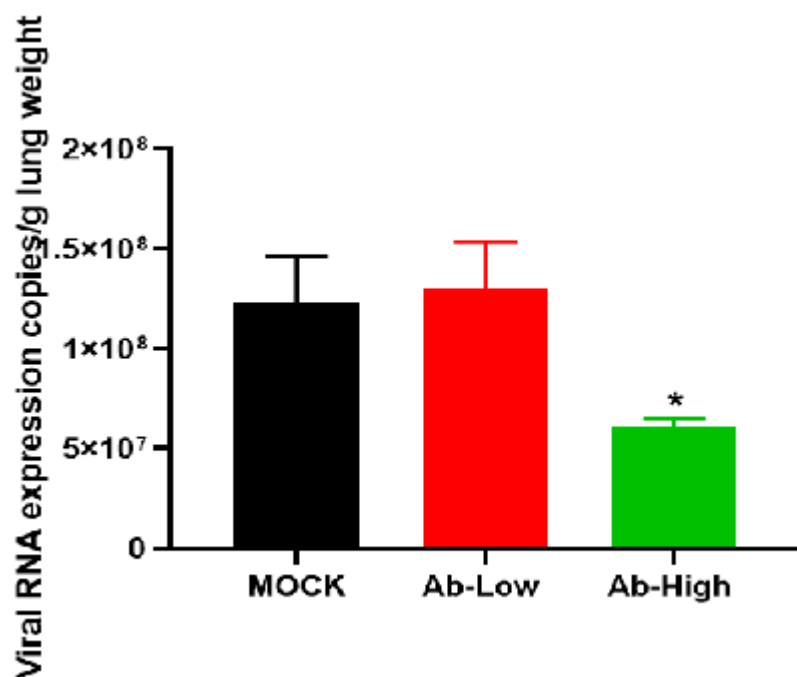


Figure 5. The viral load in the lung tissues of hACE2 Tg mice after drug treatment.

## 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