

# hACE2

<b>Nomenclature</b>	C57BL/6Smoc- <i>Ace2</i> <sup>em3(hACE2-flag-Wpre-pA)Smoc</sup>
<b>Cat. NO.</b>	NM-HU-200218
<b>Strain State</b>	Repository Live

## Gene Summary

<b>Gene Symbol</b> <b>ACE2</b>	<b>Synonyms</b>	ACEH
	<b>NCBI ID</b>	<a href="#">59272</a>
	<b>MGI ID</b>	Null
	<b>Ensembl ID</b>	<a href="#">ENSG00000130234</a>
	<b>Human Ortholog</b>	ACE2

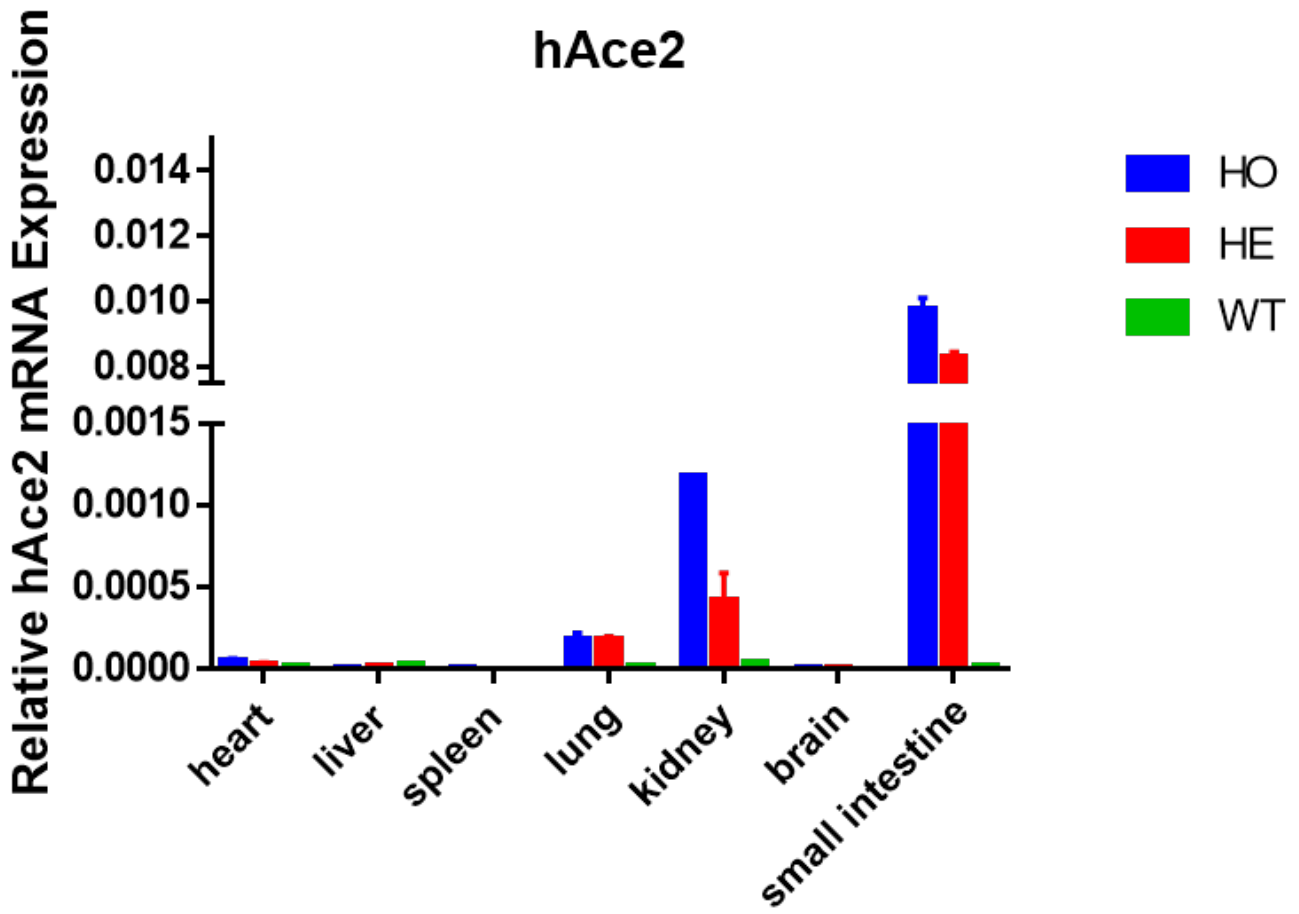
## Model Description

A human ACE2-flag-Wpre-pA expression cassette was knocked into the *Ace2* gene start codon site via CRISPR/Cas9 mediated recombination.

**Research Application:** Corona virus related research

\*Literature published using this strain should indicate: hACE2 mice (Cat. NO. NM-HU-200218) were purchased from Shanghai Model Organisms Center, Inc..

## Validation Data



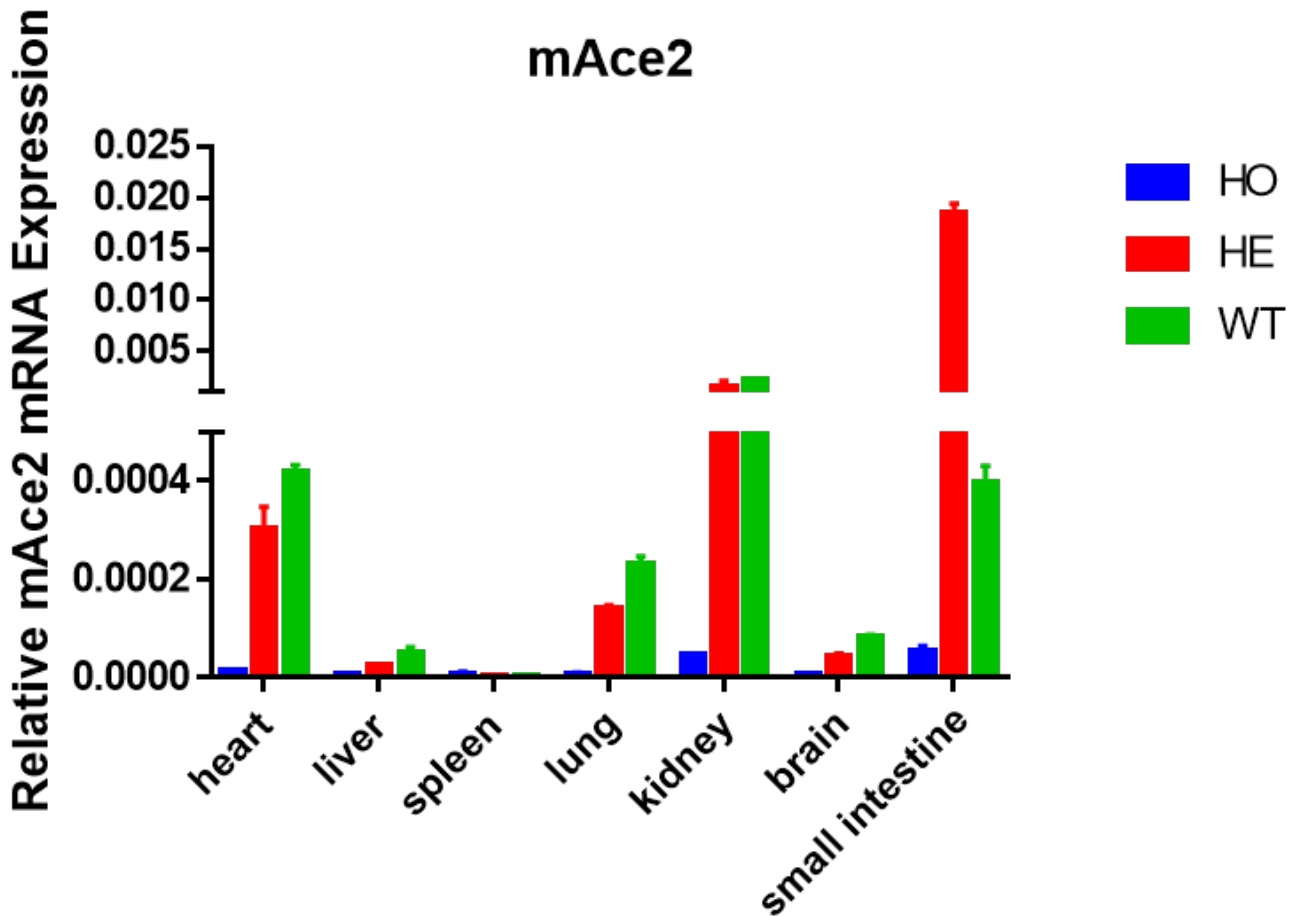


Fig1. Analysis of ACE2 expression profile by qPCR in the ACE2 humanized mice. The homozygous and heterozygous KI mice express human ACE2 in lung, kidney and small intestine; while the heterozygous KI mice and wild type express mouse *Ace2* on heart, lung, kidney and small intestine.

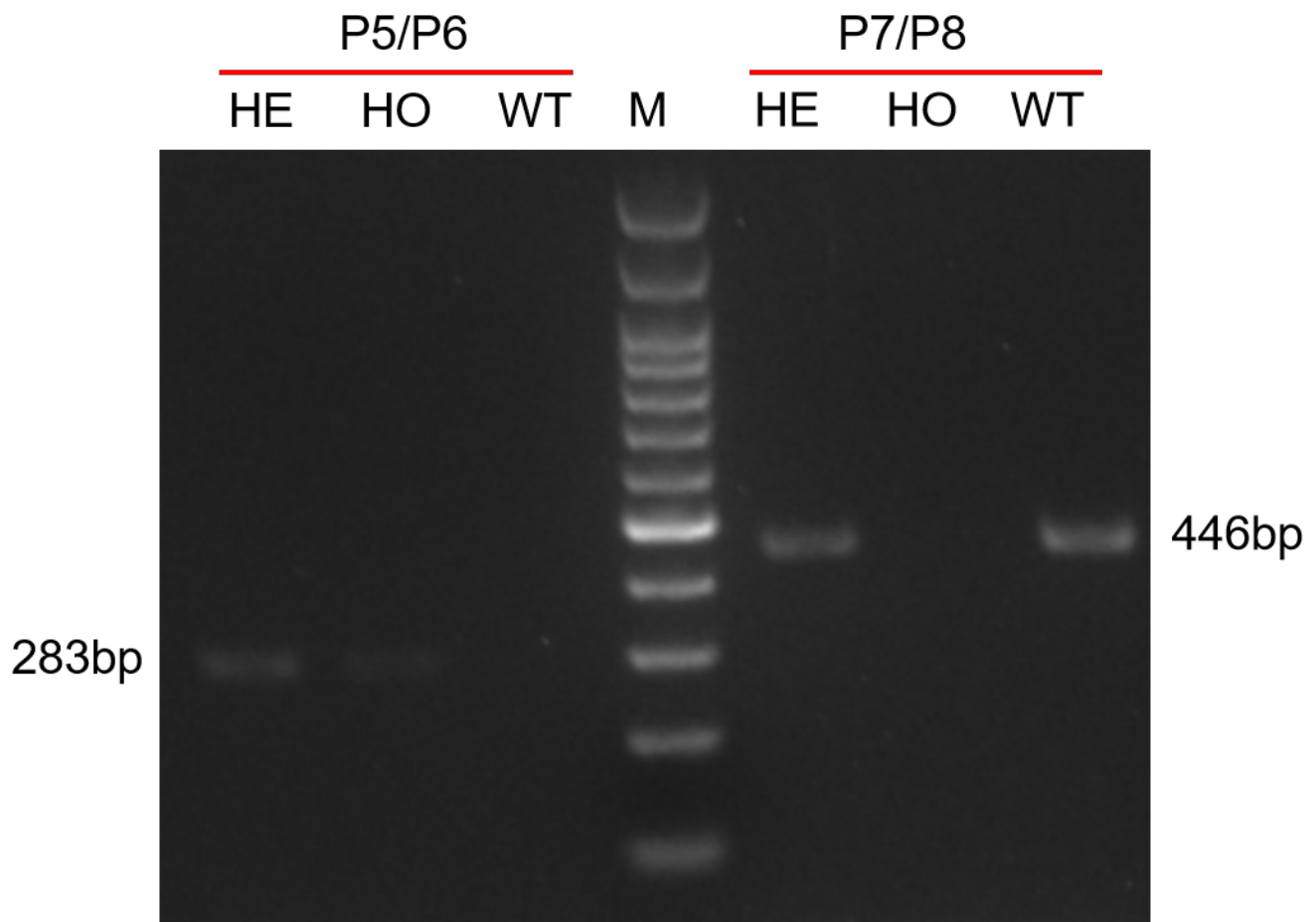


Fig2. Analysis of ACE2 gene expression in the lungs by RT-PCR in WT and ACE2 humanized mice. Mouse *Ace2* mRNA was detectable by P7/8(446bp), human ACE2 mRNA was detectable by P5/6(283bp), M:100bp Plus DNA ladder from Transgen (BM311). The homozygous KI mouse expresses human ACE2 in the lungs, while the heterozygous KI mouse expresses both human ACE2 and mouse *Ace2*.

## Publications

[The Abundant Distribution and Duplication of SARS-CoV-2 in the Cerebrum and Lungs Promote a High Mortality Rate in Transgenic hACE2-C57 Mice](#)

References: International Journal of Molecular Sciences