

hACE2

Nomenclature	C57BL/6Smoc-Ace2 ^{em3(hACE2-flag-Wpre-pA)Smoc}
Cat. NO.	NM-HU-200218
Strain State	Repository Live

Gene Summary

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

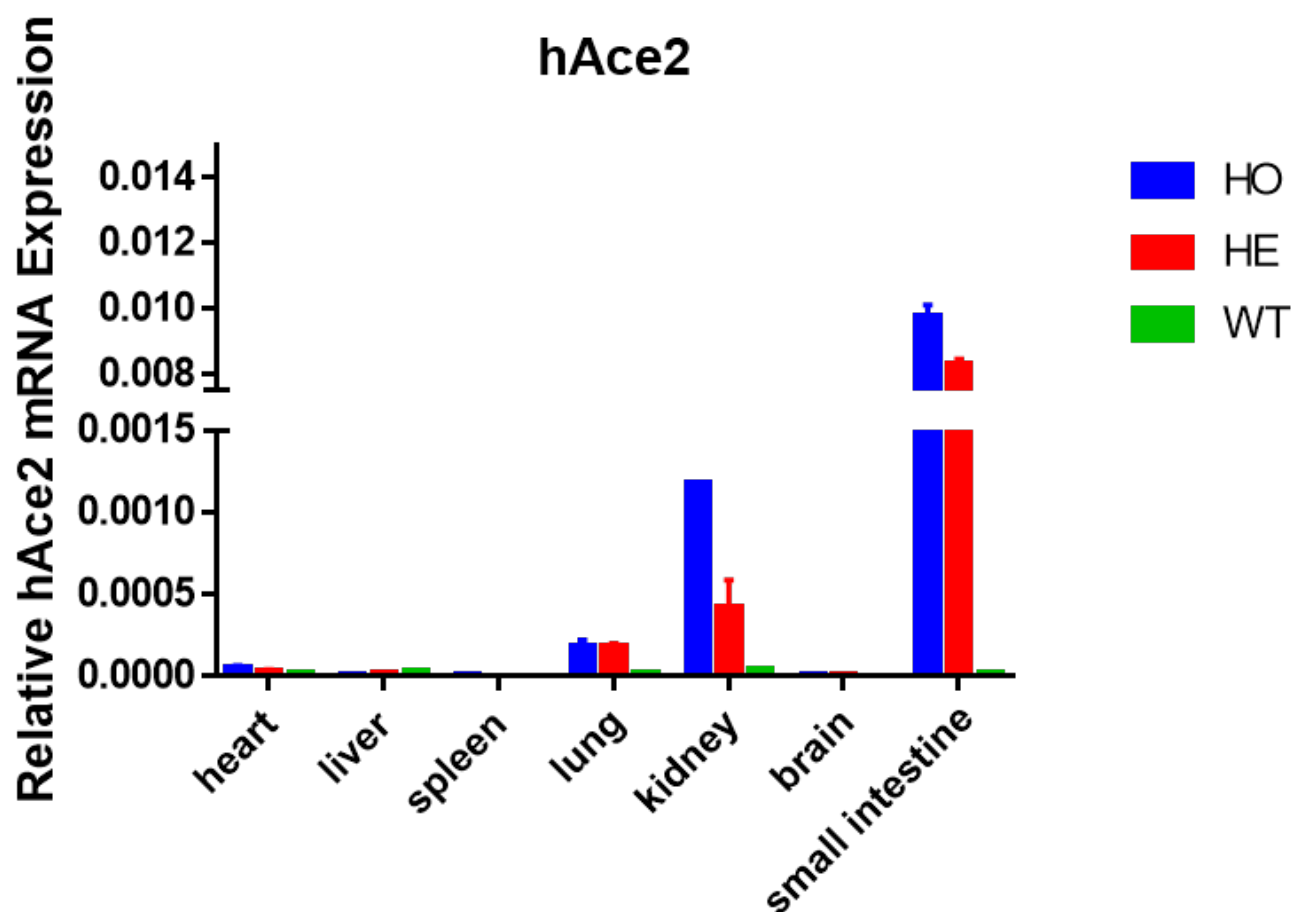
Model Description

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



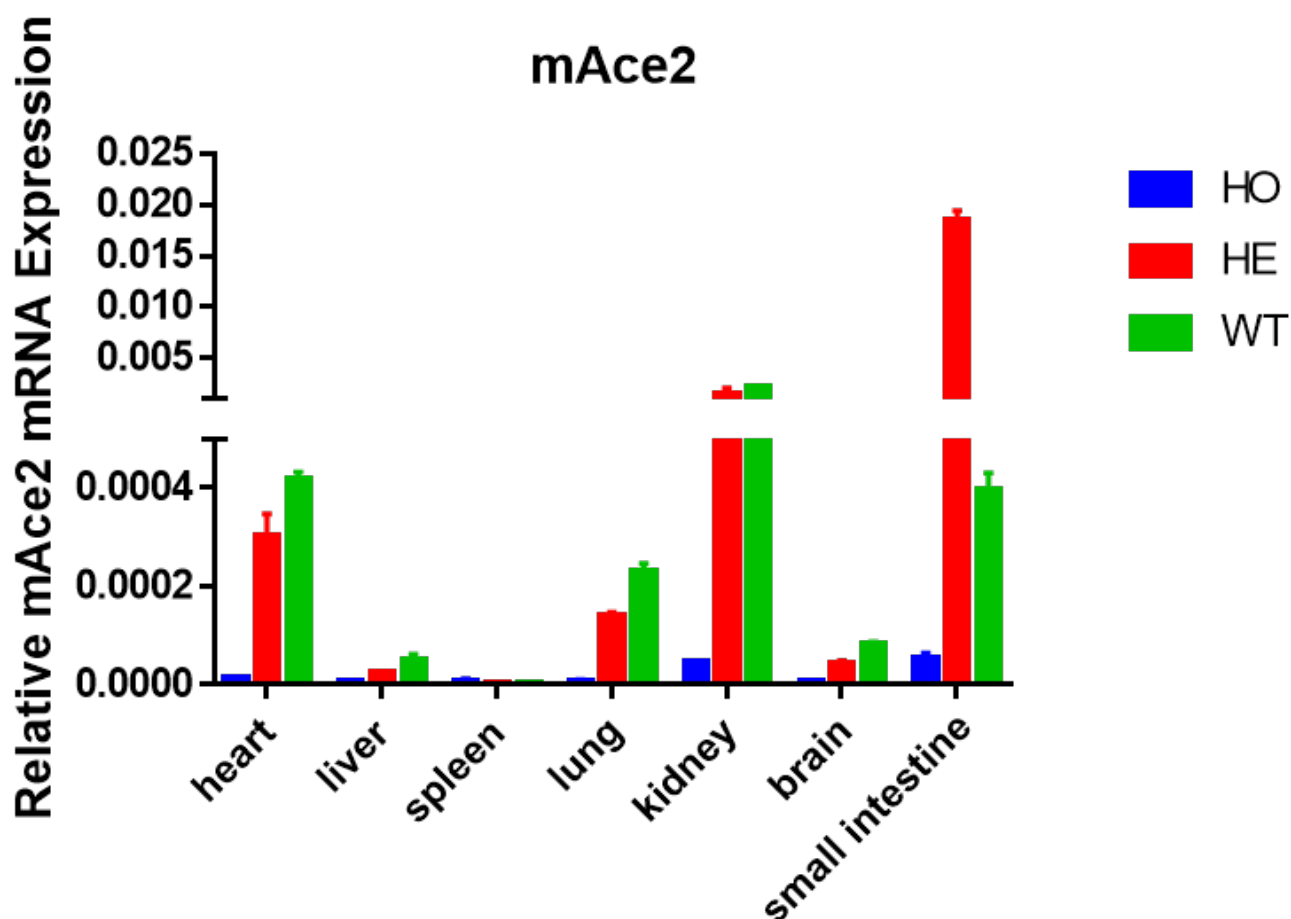


Fig1. Analysis of ACE2 expression profile by qPCR in the ACE2 humanized mice. The homozygous and heterozygous KI mice express human ACE2 in lung, kidney and small intestine; while the heterozygous KI mice and wild type express mouse Ace2 on heart, lung, kidney and small intestine.

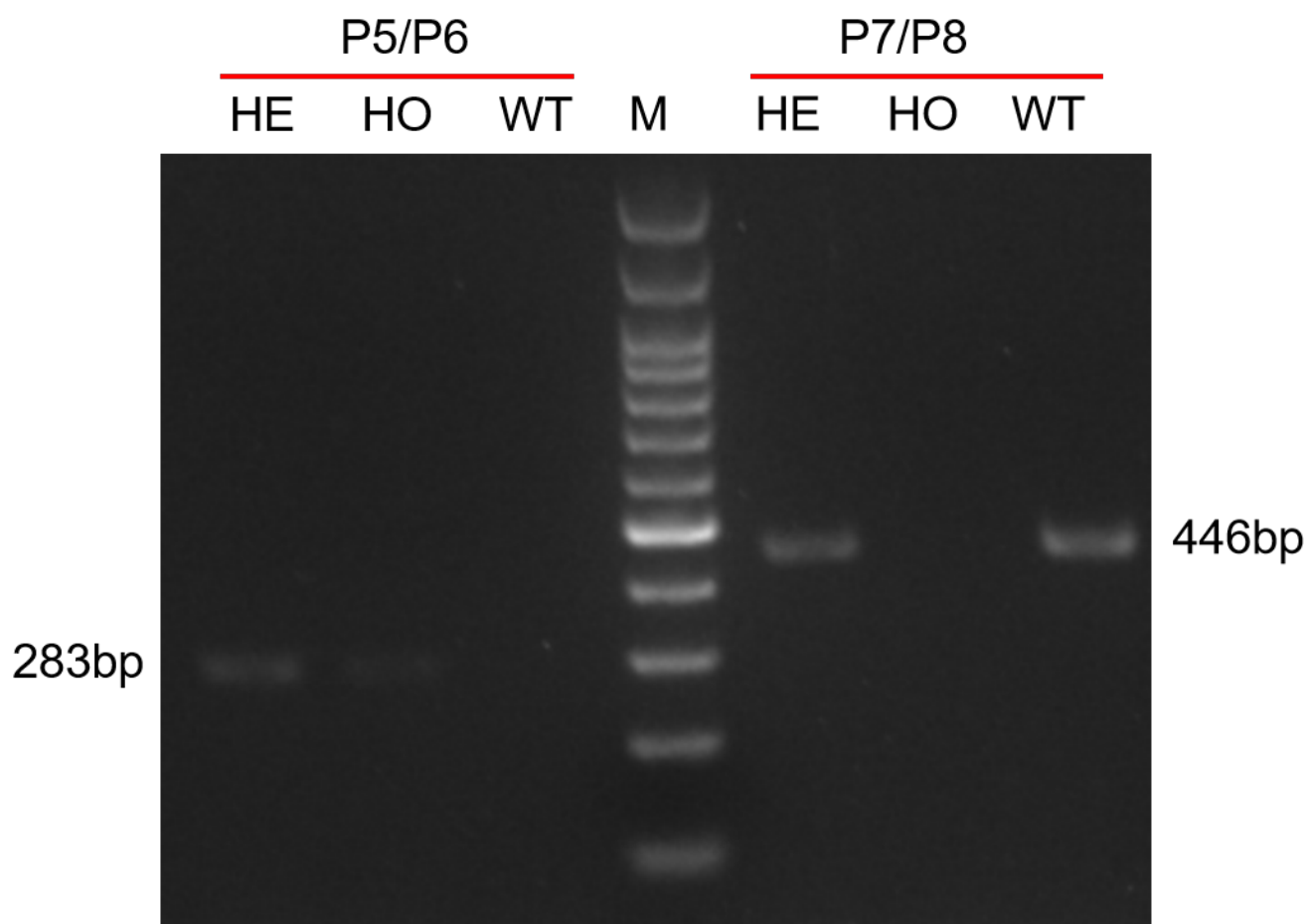


Fig2. Analysis of ACE2 gene expression in the lungs by RT-PCR in WT and ACE2 humanized mice. Mouse Ace2 mRNA was detectable by P7/8(446bp), human ACE2 mRNA was detectable by P5/6(283bp), M:100bp Plus DNA ladder from Transgen (BM311). The homozygous KI mouse expresses human ACE2 in the lungs, while the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