

# hCD3EDG(BALB/c)

<b>Nomenclature</b>	BALB/c- <i>Cd3e</i> <sup>tm1(hCD3E)</sup> <i>Cd3d</i> <sup>tm1(hCD3D)</sup> <i>Cd3g</i> <sup>tm1(hCD3G)</sup> /CbSmoc
<b>Cat. NO.</b>	NM-HU-220122
<b>Strain State</b>	Repository Live

## Gene Summary

Gene Symbol CD3E	<b>Synonyms</b>	CD3; T3e; AI504783; CD3epsilon
	<b>NCBI ID</b>	<a href="#">12501</a>
	<b>MGI ID</b>	<a href="#">88332</a>
	<b>Ensembl ID</b>	<a href="#">ENSMUSG00000032093</a>
	<b>Human Ortholog</b>	CD3E
Gene Symbol CD3D	<b>Synonyms</b>	T3d
	<b>NCBI ID</b>	<a href="#">12500</a>
	<b>MGI ID</b>	<a href="#">88331</a>
	<b>Ensembl ID</b>	<a href="#">ENSMUSG00000032094</a>
	<b>Human Ortholog</b>	CD3D
Gene Symbol CD3G	<b>Synonyms</b>	T3g; Ctg3; Ctg-3
	<b>NCBI ID</b>	<a href="#">12502</a>
	<b>MGI ID</b>	<a href="#">88333</a>
	<b>Ensembl ID</b>	<a href="#">ENSMUSG00000002033</a>
	<b>Human Ortholog</b>	CD3G

## Model Description

The endogenous mouse *Cd3e*/*Cd3d*/*Cd3g* genes were replaced by human CD3E/CD3D/CD3G gene.

\*Literature published using this strain should indicate: hCD3EDG(BALB/c) mice (Cat. NO. NM-HU-220122) were purchased from Shanghai Model Organisms Center, Inc..

## Validation Data

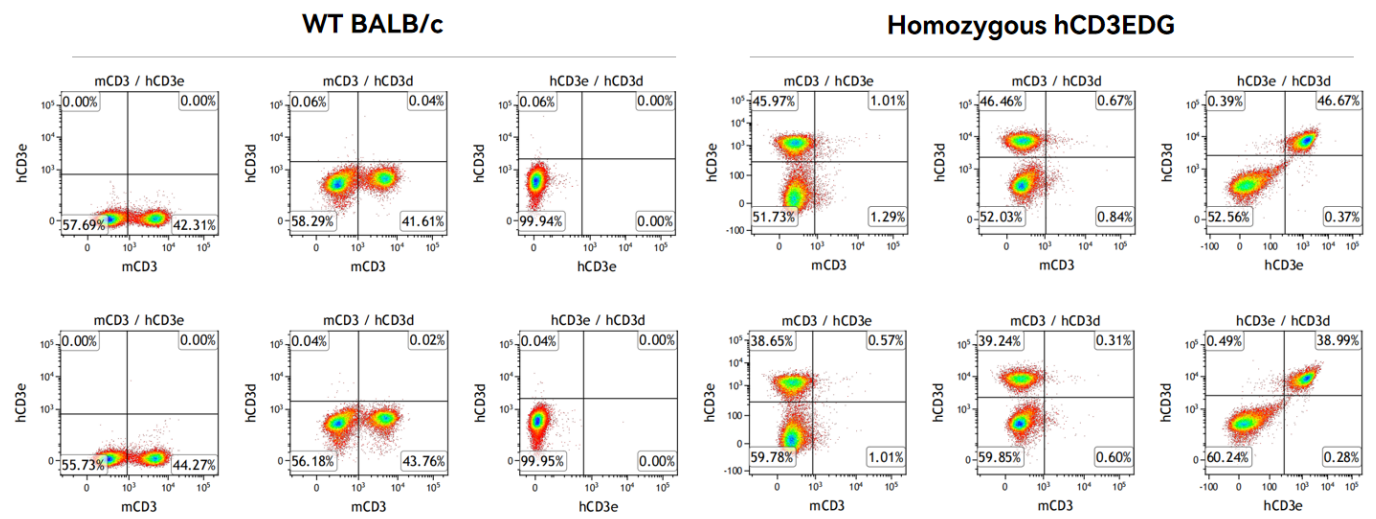


Fig1. Detection of surface expression of human CD3E/CD3D on T cells in spleen in homozygous hCD3EDG (BALB/c) mice. (In collaboration with CrownBio.)

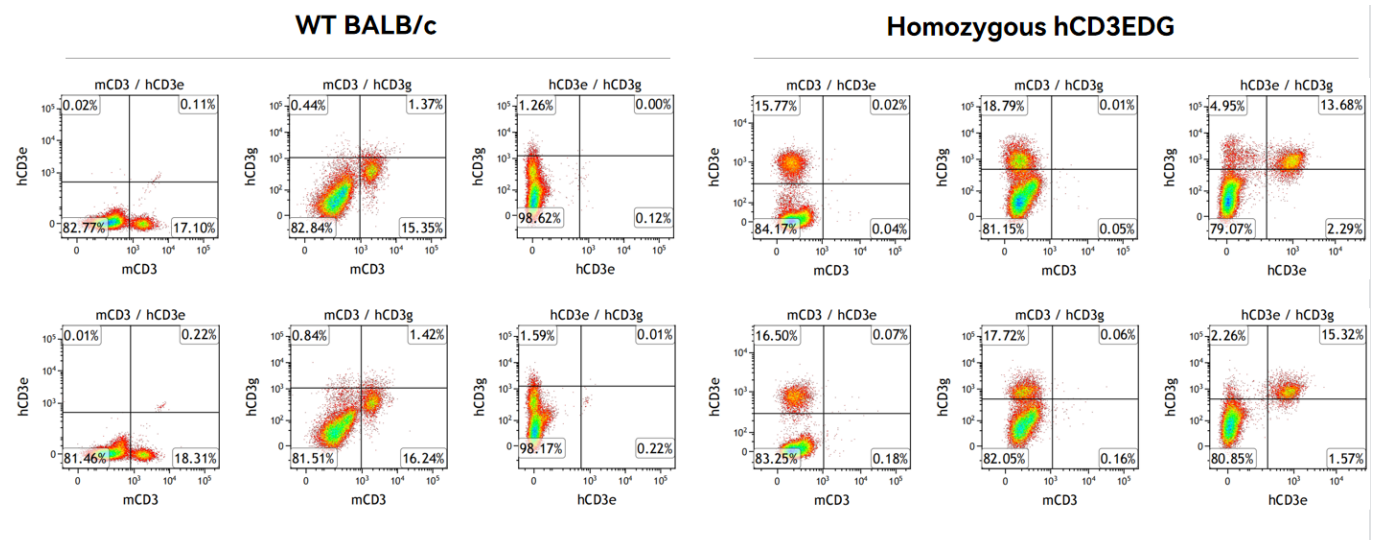


Fig2. Detection of surface expression of human CD3E/CD3G on T cells in blood in homozygous hCD3EDG (BALB/c) mice. (In collaboration with CrownBio.)

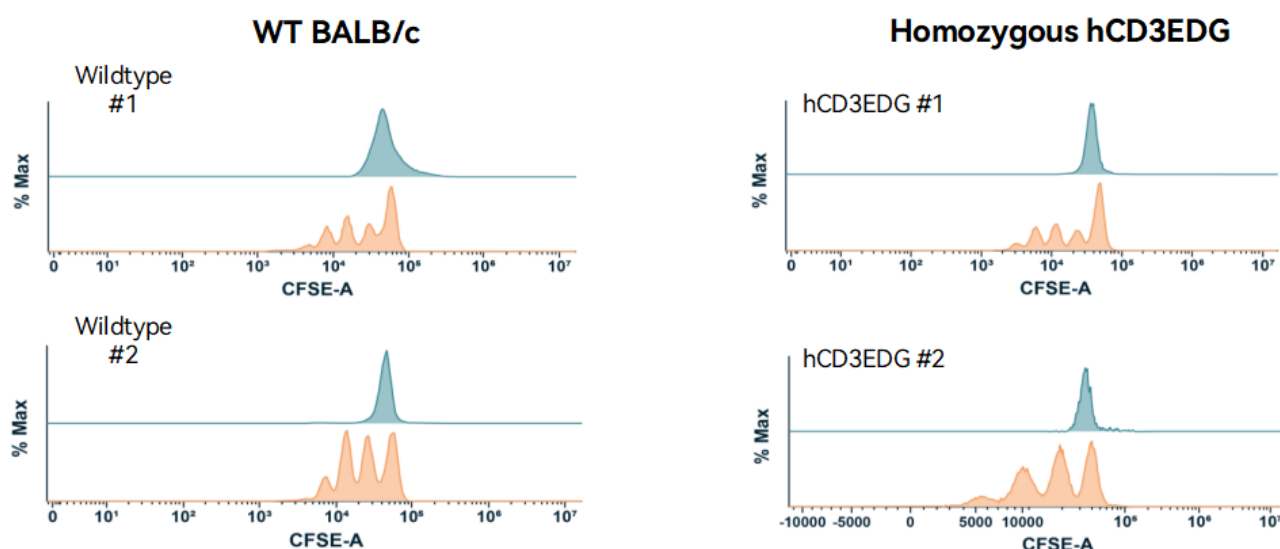


Fig3. Analysis of TCR signalling in hCD3EDG (BALB/c) mice upon CD3/CD28 activation *in vitro*. (In collaboration with CrownBio.)

Note: CFSE-dilution as a measure of mouse T cell proliferation.

CD3+ T cells were isolated in the splenocytes from WT BALB/c and hCD3EDG mice. Isolated T cells were labeled with  $\mu$ CFSE dye and stimulated with anti-mCD3 (5 $\mu$ g/mL) or anti-hCD3 (5 $\mu$ g/mL) plus soluble anti-mCD28 (50 $\mu$ g/mL) for in vitro culture for 72 hr. T cell proliferation was analyzed by flow cytometry for CFSE dilution.