

hCD3EDG(BALB/c)

Nomenclature BALB/c- $Cd3e^{tm1(hCD3E)}Cd3d^{tm1(hCD3D)}Cd3g^{tm1(hCD3G)}$ /CbSmoc

Cat. NO. NM-HU-220122

Strain State Embryo cryopreservation

Gene Summary

| Gene Symbol CD3E | Synonyms | CD3; T3e; Al504783; CD3epsilon |
|---------------------|----------------|--------------------------------|
| | NCBI ID | <u>12501</u> |
| | MGI ID | 88332 |
| | Ensembl ID | ENSMUSG00000032093 |
| | Human Ortholog | CD3E |
| Gene Symbol CD3D | Synonyms | T3d |
| | NCBI ID | 12500 |
| | MGI ID | 88331 |
| | Ensembl ID | ENSMUSG00000032094 |
| | Human Ortholog | CD3D |
| Gene Symbol CD3G | Synonyms | T3g; Ctg3; Ctg-3 |
| | NCBI ID | 12502 |
| | MGI ID | 88333 |
| | Ensembl ID | ENSMUSG0000002033 |
| | Human Ortholog | 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

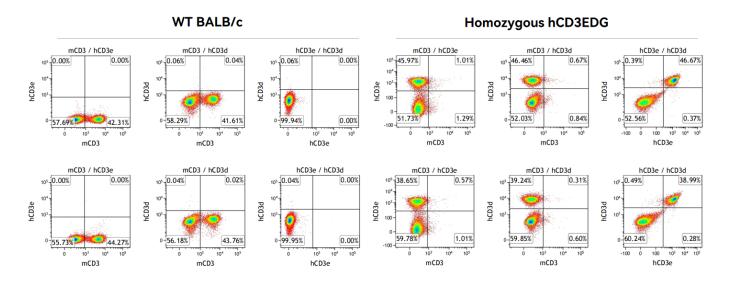


Fig1. Detection of surface expression of human CD3E/CD3D on T cells in spleen in homozygous hCD3EDG (BALB/c) mice. (In collaboration with CrownBio.)

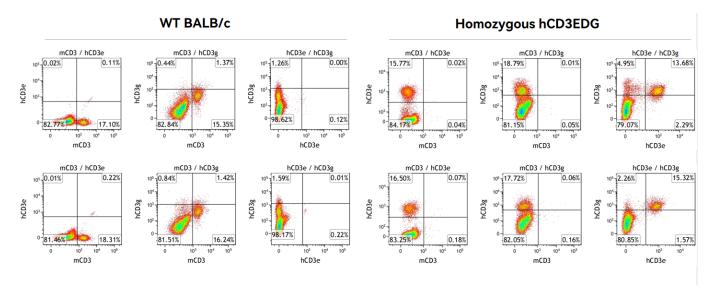


Fig2. Detection of surface expression of human CD3E/CD3G on T cells in blood in homozygous hCD3EDG (BALB/c) mice. (In collaboration with CrownBio.)



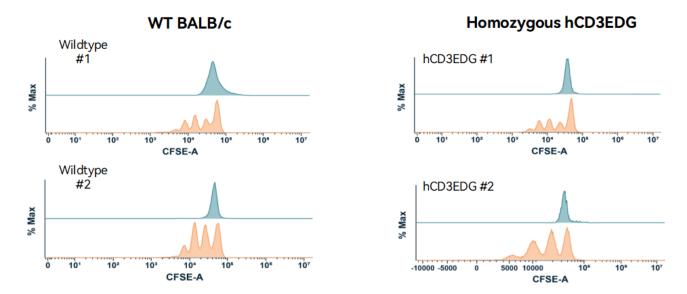


Fig3. Analysis of TCR signalling in hCD3EDG (BALB/c) mice upon CD3/CD28 activation *in vitro*. (In collaboration with CrownBio.)

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 μ CFSE dye and stimulated with anti-mCD3 (5μ g/mL) or anti-hCD3 (5μ g/mL) plus soluble anti-mCD28 (50μ g/mL) for in vitro culture for 72 hr. T cell proliferation was analyzed by flow cytometry for CFSE dilution.