genOway | ULTIMATE PREDICTABILITY

genO-hCD3ε (scan or click)

HUMANIZED genO-hCD3ε MOUSE MODEL

genO-hCD3ε immunocompetent mice enable the preclinical *in vivo* efficacy assessment of T-cell engagers, to study cancer cell recognition, immunosuppressant therapies, etc.

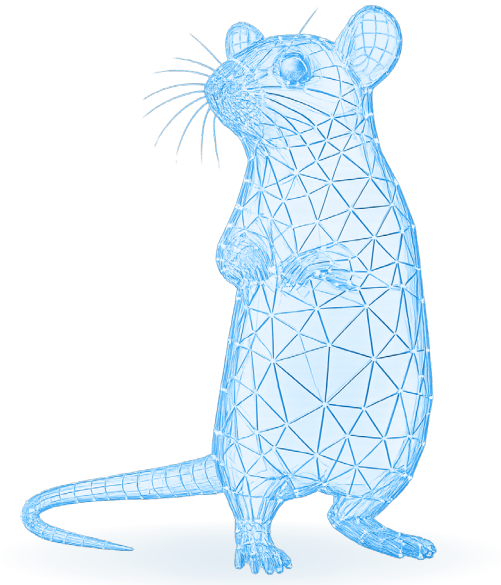
APPLICATIONS

genO-hCD3ε drives advances across **immuno-oncology** and **autoimmunity**, enabling the following applications:

- ☑ **Assess the efficacy** of T-cell engagers targeting the CD3 SP34 epitope, such as by performing tumor growth inhibition assays
- ☑ Perform **long-term studies** as **immunological memory** is observed in the **genO-hCD3ε model** following treatment
- ☑ **Evaluate the safety** assessment studies for analyzing the potential of inducing cytokine release syndrome (CRS) upon treatment with anti-CD3 antibodies

MODEL USED BY

abbvie · AstraZeneca · AMGEN · Bristol Myers Squibb · HARPOON Therapeutics · janssen · Pfizer · Seattle Children's · Takeda



MODEL FEATURES

- ☑ Conserved interaction with CD3γ, CD3δ and CD3ζ subunits
- ☑ Physiological expression of human CD3
- ☑ Functional T/B-cell cooperation
- ☑ Fully functional mouse immune system

INDS WITH THE MODEL

HARPOON Therapeutics — **Molecule tested: HPN328**

ORDERS, DELIVERY & CARE

- ☑ Orders are made directly with genOway; breeding, housing and delivery are outsourced
- ☑ Breeding facilities in the US and Europe through our trusted partners:

TACONIC BIOSCIENCES · charles river

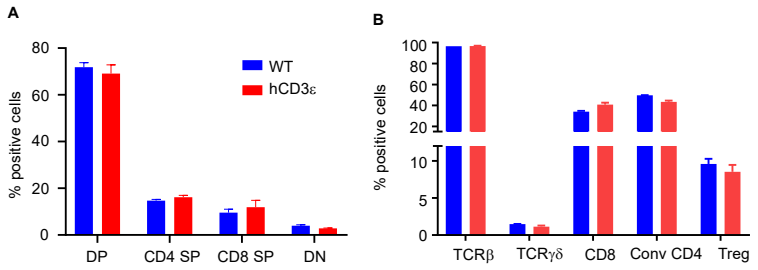
- ☑ Quick, compliant, and reliable door-to-door delivery worldwide at your facility or at the CRO of your choice
- ☑ Models with certified **SOPF** health status from **AAALAC-accredited** and **PHS-assured** professional breeders

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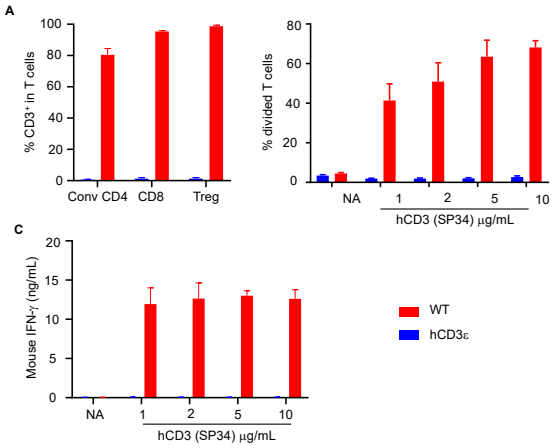
genO-hCD3ε (scan or click)

SELECTED VALIDATION DATA

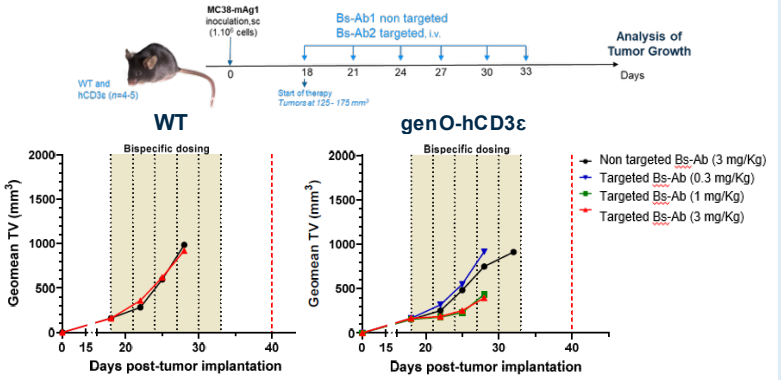
More data available on our website or upon request



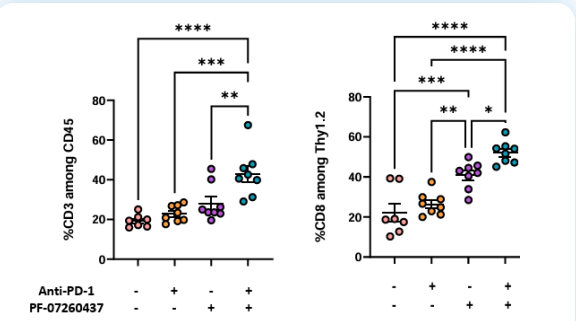
CD3ε humanization does not alter the thymocytes' distribution along the maturation process and its expression on T cells



Anti human-CD3 SP34 clone specifically binds to hCD3ε and induces T-cell activation in genO-hCD3ε mice



A T-cell engager targeting CD3 and a tumoral antigen, showed a dose-dependent anti-tumor effect in vivo



Treatment of genO-CD3ε mice with a new TCE (PF-0726437) leads to increased T-cell infiltration in tumors

KEY PUBLICATIONS

Bristol Myers Squibb

Humanization of a strategic CD3 epitope enables evaluation of clinical T-cell engagers in a fully immunocompetent in vivo model
Zorn et al., 2022 - Sci Rep

Pfizer

A Novel B7-H4xCD3 Bispecific T Cell Engager (PF-07260437) Synergizes with Breast Cancer Standard of Care and Immune-Checkpoint Therapies
Abayasiriwardana et al., 2025 - Mol Cancer Ther

HARPOON Therapeutics

HPN328, a Trispecific T Cell-activating Protein Construct Targeting DLL3-Expressing Solid Tumors
Molloy et al., 2024 - Mol Cancer Ther

RELATED MODELS

MICE

- genO-hCD3ε/hCD28
- genO-panhCD3/hCD137
- genO-panhCD3
- genO-panhCD3/hFcγR
- genO-panhCD3/hCD28
- genO-panhCD3/hPD-1/hPD-L1
- genO-panhCD3/hPD-1
- and more...

CELLS

- genO-MC38-hEpCAM-LZ
- genO-MC38-hFAP-LZ
- genO-MC38-hPD-L1-hHER2
- genO-MC38-hPD-L1
- genO-MC38-hPD-L1-hFAP-LZ
- genO-MC38-hPD-L1-LZ

For more information

Visit the genO-hCD3ε page

For further inquiries

Contact Us