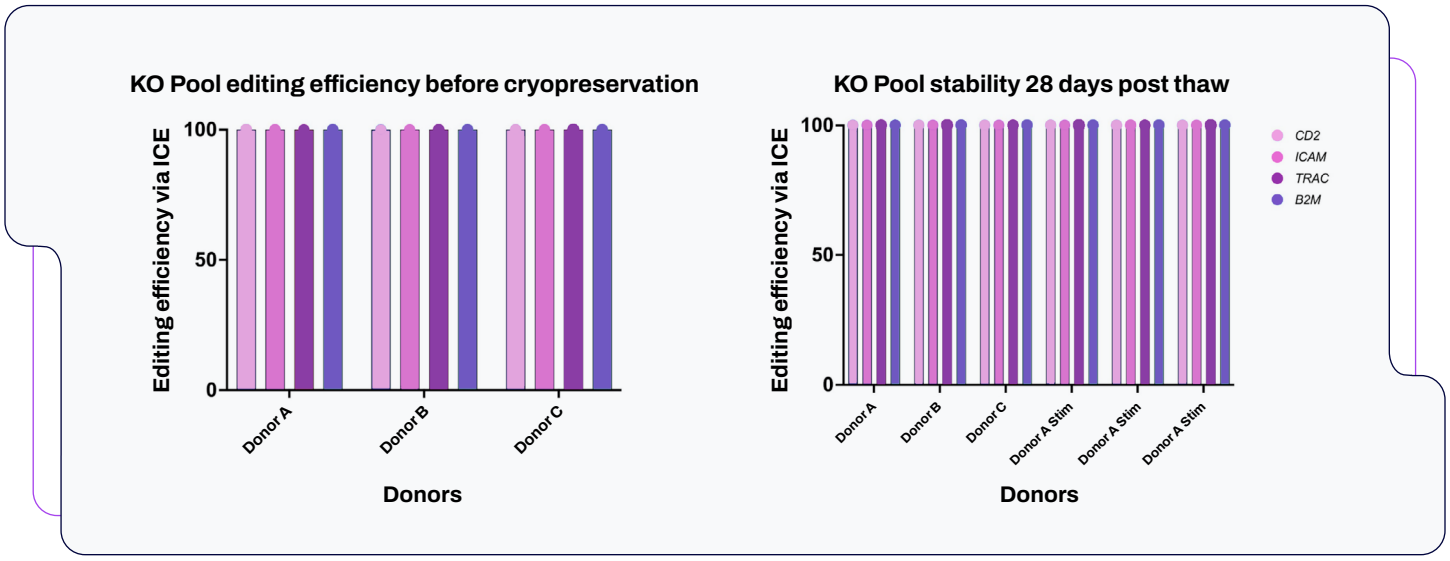
Knockout CD8+ T-cell Pools

Custom-edited CD8+ T-cells

Made-to-order primary human CD8+ T-cell pools in 14 days or faster. EditCo guarantees >80% knockout efficiency that can be stable for weeks of cell expansion post-thaw.

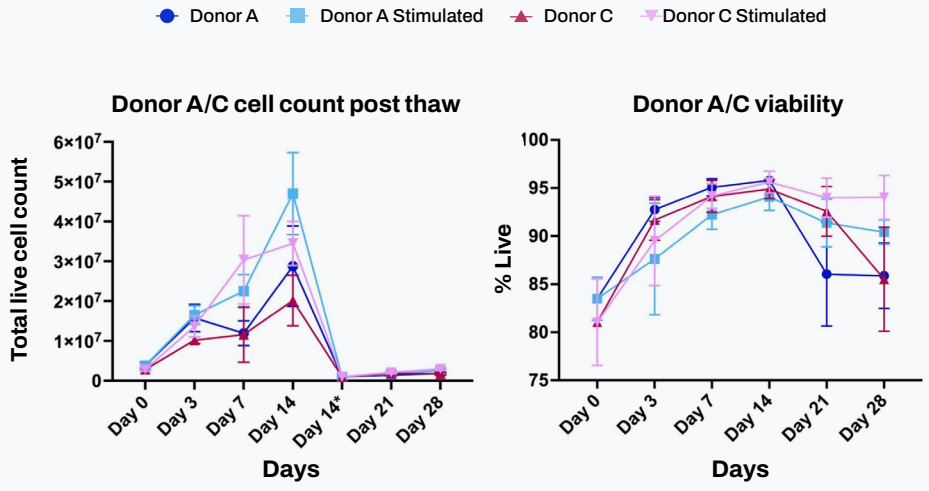
High and Stable Editing Efficiency CD8+ T-cell pools. Three different donors show high editing efficiency, as determined by ICE analysis, across various targeted loci with little change between deliverable (before cryopreservation, left graph) and extended culture (28 days post-thaw, right graph). Cell stimulation did not affect the maintenance of the KO levels.



High viability and expansion

EditCo Knockout CD8+ T-cells can be thawed and expanded for weeks, with or without TCR stimulation.

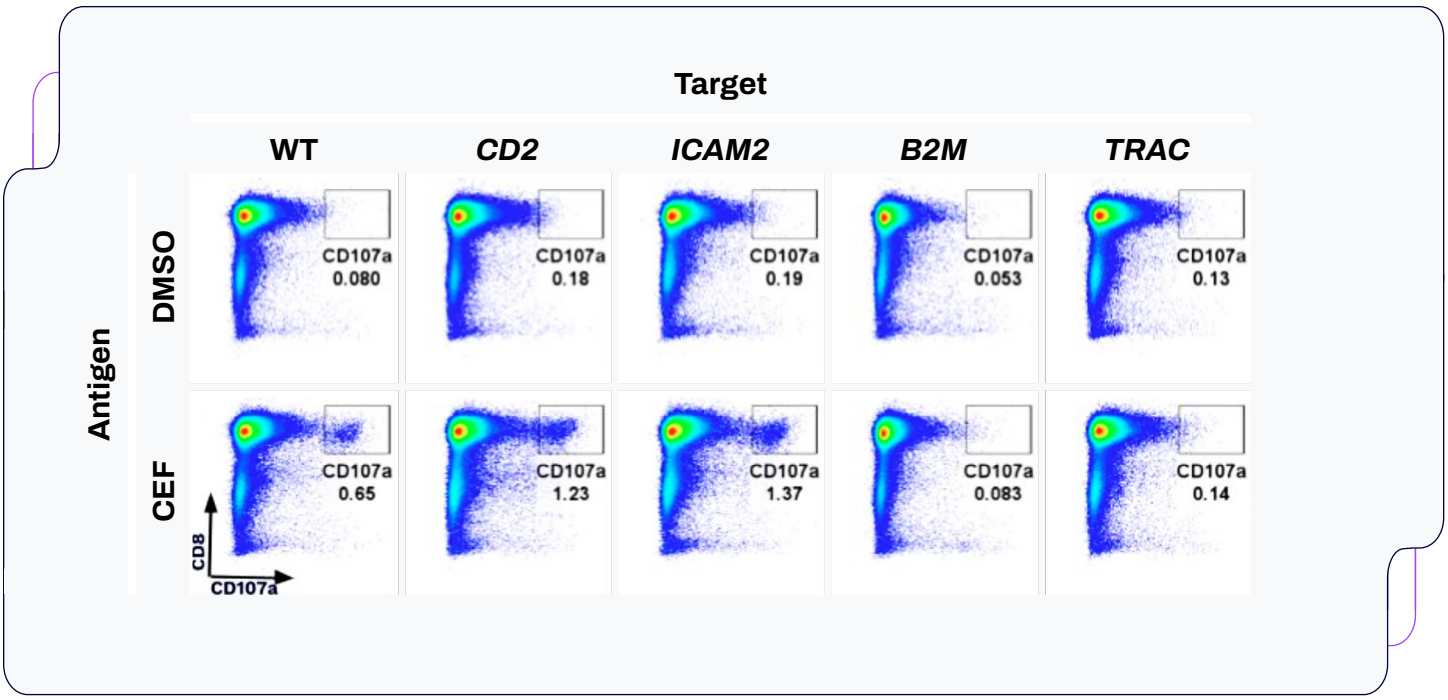
CD8+ viability and expansion after thaw. Edited CD8 T-cell pools were thawed and plated in G-Rex™-24 consumables at 1E6 cells per well in Immunocult™ T-cell expansion media supplemented with 100ng/ml recombinant human Interleukin-2. Stimulated samples were treated with Immunocult™ CD2-CD3-CD28 T-cell activator for 3 days. Cultures were fed every 3 days by replacing 90% volume with fresh media. On Day 14* cell number was returned to 1E6 cells per well to prevent overgrowth.



Biologically Relevant

EditCo knockout CD8 T-cell pools are highly functional and capable of anti-gen-specific cytotoxic responses.

Antigen specific T-cell activation: Edited CD8+ pools were stimulated with CEF peptides presented on HLA-1 matched B-cells. After 2 rounds of stimulation T-cells were incubated with CEF peptides for 4 hours, and cytotoxic activation was measured by CD107a surface localization. WT, *CD2*, *ICAM-2* edited pools showed robust CD107a expression compared to DMSO controls. As expected, *B2M* and *TRAC* knockout pools showed no induction above baseline, given their role in antigen presentation and recognition.



Donor	Gender	Age	Ethnicity	Smoker	BMI
A	F	29	CAU	N	23
B*	F	29	AFA	N	26
C	M	23	CAU	N	26

*Donor B did not qualify for additional testing due to expansion concerns and is not available as a prescreened offering. Donors A and C are the same donors in the above graphs.

Prevalidated Donor cells

EditCo offers prescreened cells with optimized editing efficiency and expansion levels from both male and female donors to kick off projects immediately.

Downstream Applications & Partnerships

EditCo's Discovery Partners Ecosystem creates a seamless workflow from EditCo's Engineered CD8+ T-cells to phenotypic data, providing researchers with a faster, more efficient, and more reliable way to drive their discoveries forward.

Researchers can access the full range of gene editing and analysis services in one place, saving time and resources. The result is a more streamlined drug discovery process that can help accelerate the development of life-saving treatments.