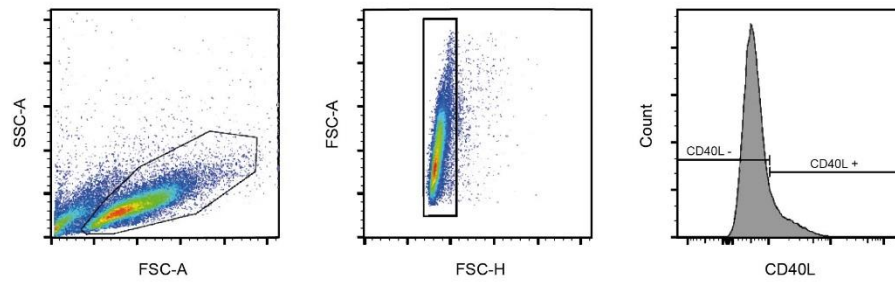


Supplemental information

A



B

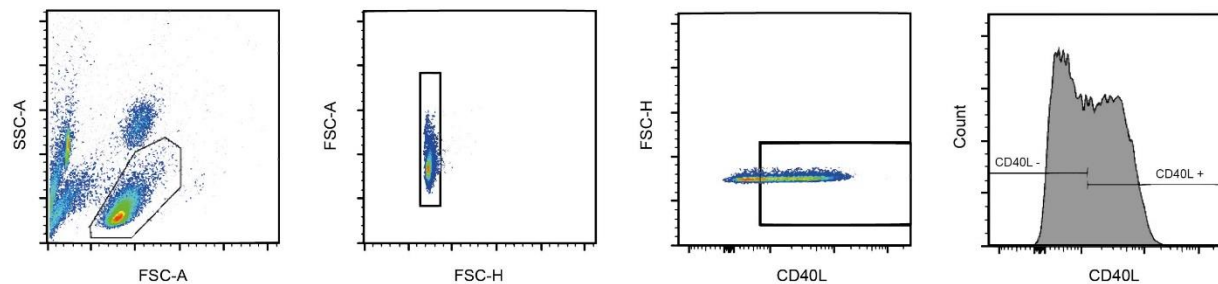


Figure S1. CD40L expression is regulated via m⁶A ‘eraser’ FTO in activated CD4⁺ T lymphocytes. (a) Jurkat cells with CRISPR-Cas9 knockout of FTO were activated with 4 hours PMA and ionomycin. Flow cytometry gating strategy. **(b)** Human CD4⁺ T lymphocytes were pre-incubated for 48 hours with 50μM entacapone. The cells were subsequently activated with CD3/CD28 beads overnight. Flow cytometry gating strategy.

Table S1 – qPCR primers

Target gene	Forward (5' to 3')	Reverse (5' to 3')
CD40L	ATGGGAAACAGCTGACCGTT	GATTGTTGCCCCGCAAGGTTT
Pre-CD40L	CCTCCTCTTGTTGATGCCGT	AGGATCTTTCTCCTGTGTTGCAT
β2M	GGCATCTTCAAACCTCCATG	ATGAGTATGCCTGGCCGTGTGA
GUSB	AGACAAGGGGGCTCCGTA	CGTTTCTGCTCCATACTCGC
SETD7	GGGGTTCAGAGACCTGGAAT	GCATGGTGAGAGGATGTGAC

Table S2 – Flow cytometry antibodies

Marker	Fluorochrome	Catalog number	Company
Fixable viability dye	eF506	15560607	Invitrogen eBioscience
Mouse anti-CD3	APC/Cy7	2102130	Sony Biotechnology
Mouse anti-CD4	PerCP/Cy5.5	300530	Biolegend
Mouse anti-CD40L	PacB	310820	Biolegend

Table S3 – Western blot antibodies

Target gene	Source	Catalog number	Company
FTO	Rabbit	ab124892	Abcam
H3	Rabbit	9715S	Cell Signaling Technology
Anti- rabbit HRP	Swine	P021702-2	Agilent
Anti- mouse HRP	Rabbit	P026002-2	Agilent