Supplementary Material

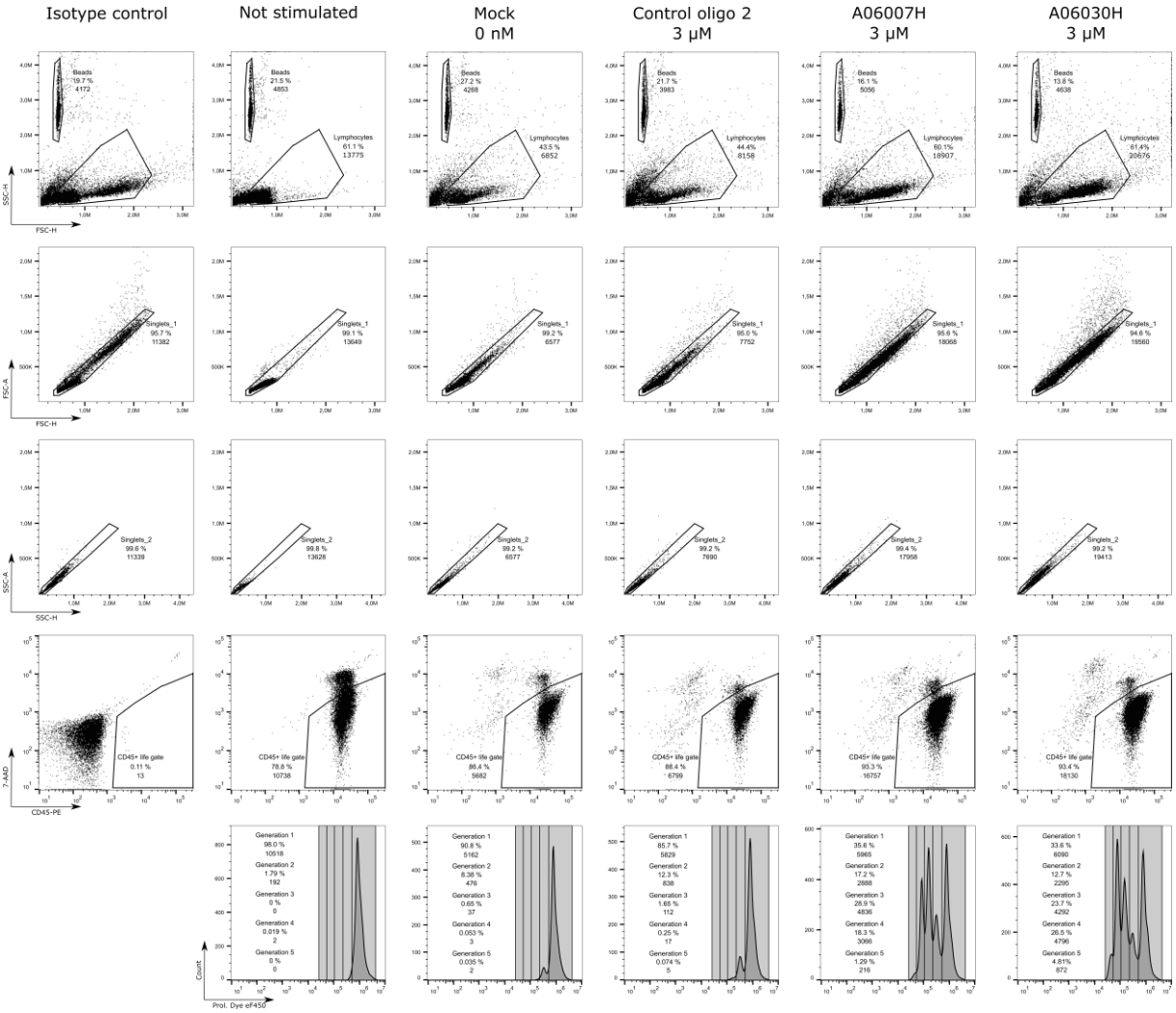
Supplementary Tables

Supplementary table 1

ASO ID	Length	Sequence	Description
A06007H	15	+G*+A*+T*T*G*T*C*C*A*G*G*A*+G*+T*+T	Human IDO1-specific ASO
A06008H	15	+C*+T*+C*A*A*C*T*C*T*T*T*C*+T*+C*+G	Human IDO1-specific ASO
A06030H	16	+A*+G*+G*C*G*C*T*G*T*G*A*C*T*+T*+G*+T	Human IDO1-specific ASO
A06043H	17	+C*+C*+A*G*A*C*T*C*T*A*T*G*A*G*+A*+T*+C	Human IDO1-specific ASO
A06044H	17	+G*+A*+G*A*T*G*A*T*C*A*A*T*G*C*+T*+G*+A	Human IDO1-specific ASO
A06045H	17	+A*+G*+G*C*G*C*T*G*T*G*A*C*T*T*+G*+T*+G	Human IDO1-specific ASO
A07006H	14	+T*+G*+T*A*T*G*A*C*A*G*C*+C*+G*+T	Human TDO2-specific ASO
A07058H	17	+A*+T*+C*G*T*G*G*T*G*C*T*G*A*A*+C*+A*+A	Human TDO2-specific ASO
Control oligo 1	18	+C*+G*+T*T*T*A*G*G*C*T*A*T*G*T*A*+C*+T*+T	Control oligonucleotide, reference: PMID: 26072406
Control oligo 2	17	+T*+C*+T*A*T*C*G*T*G*A*T*G*T*T*+T*+C*+T	Control oligonucleotide

(+) LNA-modified nucleotide, (*) PTO linkage

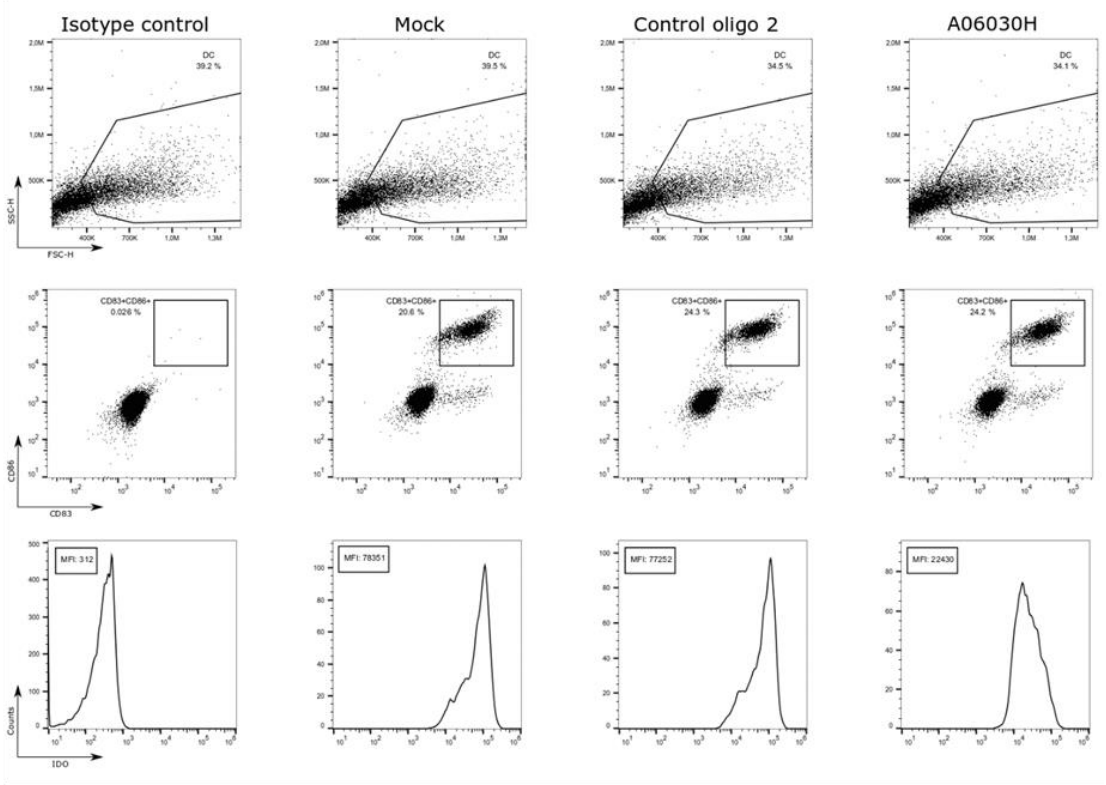
Supplementary Figures



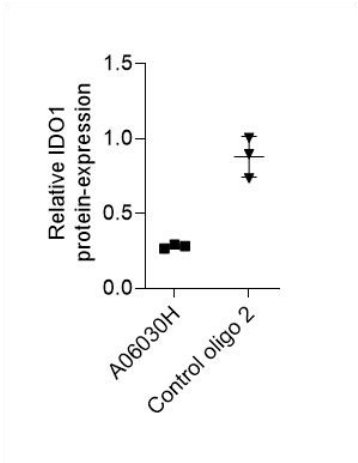
Supplementary Figure S1 Flow cytometry gating strategy for determination of proliferation of T cells in coculture with EFO-21 cells

10 000 counting beads were added to T cell / EFO-21 cocultures on day four after start of co-culture of proliferation dye-labelled T cells with EFO-21 cells, that had not been treated with an oligonucleotide (Mock, 0 nM), with the Control oligo 2 (conc. 3 µM), the IDO1-specific ASO A06007H or A06030H at different concentrations. Subsequently, T cells were harvested and stained with 7-AAD for exclusion of dead cells and with a CD45 specific antibody in order to exclude EFO-21 cells that had lost adherence to the tissue culture plate during the process of T cell harvesting. Cells were analyzed on an ACEA NovoCyte Flow Cytometer. Absolute cell counts were calculated by dividing the number of recorded cells in the respective gate to the number of recorded counting beads multiplied by 10 000.

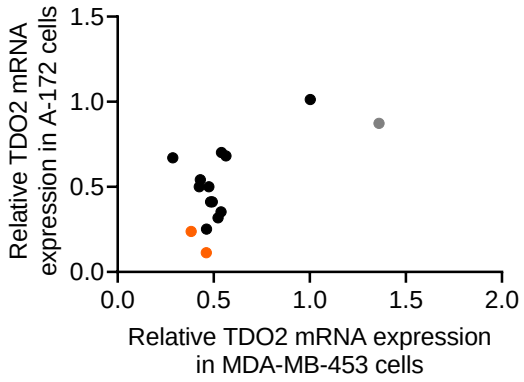
a)



b)



Supplementary Figure S2 Knockdown of IDO1 protein expression in human DC
Human dendritic cells were generated as described in materials and methods and treated with the control oligo 2 (concentration: 6.25 µM) or the IDO1-specific ASO A06030H (concentration: 6.25 µM) without the use of a transfection reagent. IDO1 protein expression was analyzed by flow cytometry. a) Exemplary gating strategy. b) Relative IDO1 protein expression (median fluorescence intensity) is depicted as compared to mock-treated DC (set to 1). The mean of triplicates +/- SD from a representative experiment is shown.



Supplementary Figure S3 TDO2 knockdown in MDA-MB-453 and A-172 cells
Data for MDA-MB-453 cells are derived from Figure 1c. TDO2 mRNA expression was determined in A-172 cells that had been treated with TDO2-specific LNA-modified ASOs (black and orange circles) or the control oligo 1 (grey circle) without the use of a transfection reagent for four days (concentration: 5 µM). ASOs that were selected for IC_{50} determination are marked in orange.