Supplementary Materials

Induction of NF-κB signaling by 303 humanized hIgG1-LALA CD40 antibodies in HEK-Blue-CD40+ cells.

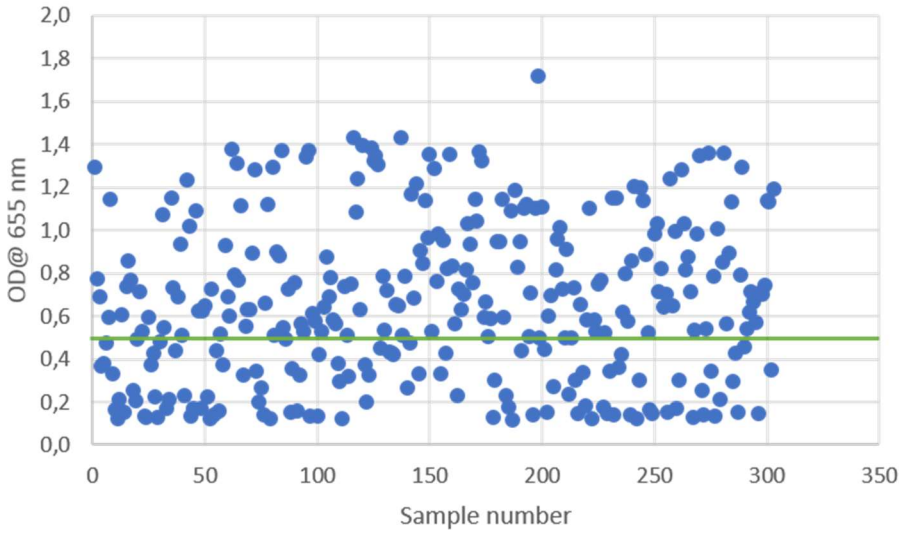

Figure S1: Induction of NF-κB signaling by 303 humanized hIgG1-LALA CD40 antibodies in HEK-Blue-CD40+ cells. Antibodies were incubated for 6 hours at a concentration range of 80 to 10000 ng/ml. Each dot indicates the maximum OD measured at 655 nm for each antibody. The green line indicates the threshold above which antibodies were classified as functional in this assay.

Impact of CD40L on CD40 antibody binding to HEK-Blue-CD40+ cells.

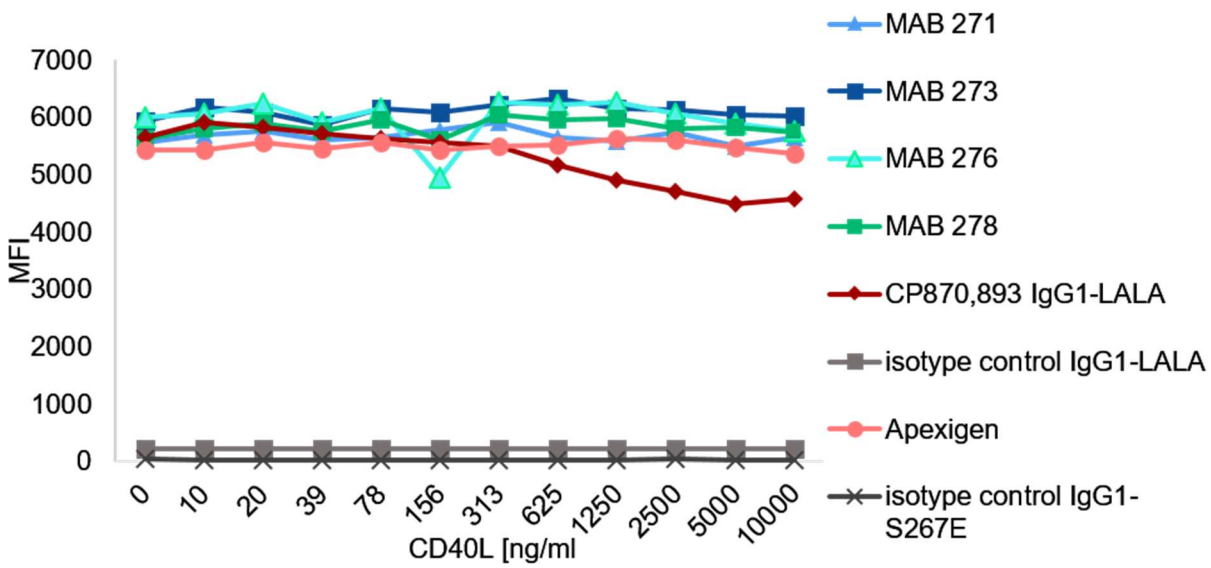

Figure S2: Impact of CD40L on CD40 antibody binding to HEK-Blue-CD40+ cells. Cells were pre-incubated with the indicated CD40-specific antibodies or isotype controls followed by treatment with increasing concentrations of soluble CD40L. Human CD40-specific or isotype antibody binding was detected using a fluorophore coupled anti-human IgG via flow cytometry.

Immune-histology analysis of anti-CD40-antibody-treated human-stem-cell-transplanted mice

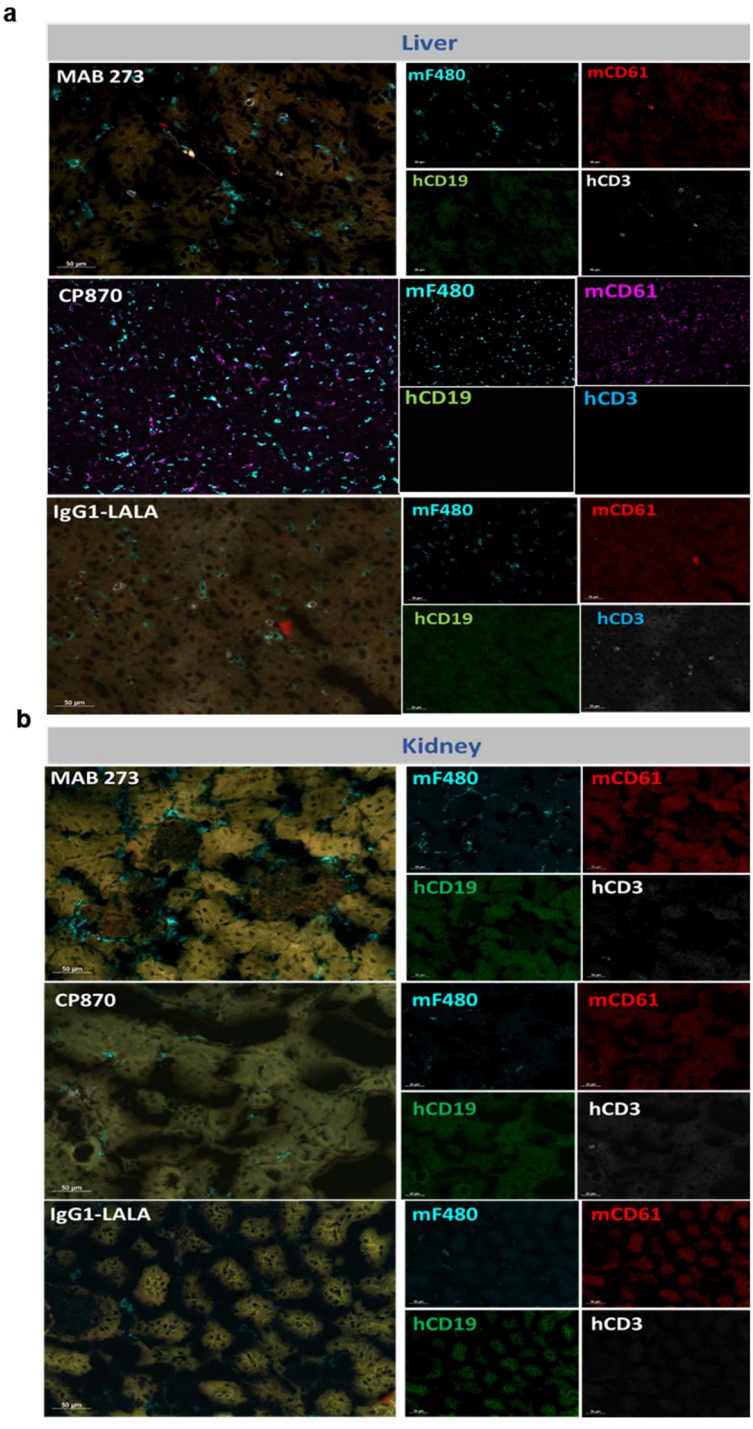

Figure S3: Immune-histology analysis of anti-CD40-antibody-treated human-stem-cell-transplanted mice. Shown is the analysis of liver (**a**) and kidney sections (**b**) of humanized mice injected with MAB 273, CP870,893 or hIgG1-LALA control antibodies. Sections were

stained for mouse macrophage- (mF4/80), mouse platelet- (mCD61), human B cell- (hCD19) and human T cell- (hCD3) markers.

CDR sequence divergence of novel CD40 agonistic antibodies

Table S1

Heavy chain CDRs				**Light chain CDRs**			
	MAB 273	**MAB 276**	**MAB 278**		**MAB 273**	**MAB 276**	**MAB 278**
MAB 271	20%	37%	56%	**MAB 271**	48%	53%	48%
MAB 273	-	30%	50%	**MAB 273**	-	56%	52%
MAB 276	-	-	58%	**MAB 276**	-	-	53%

Table S1: CDR sequence divergence of novel CD40 agonistic antibodies. Differences of amino acids at defined positions are indicated as % difference for the heavy and light chain CDR sequences (HC/LC).

Survival of antibody-treated human-stem-cell-transplanted mice

Table S2

Treatment	Total number of mice	Number of euthanized mice
MAB 273	**9**	**0**
CP-870,893	**13**	**5**
IgG1-LALA	**8**	**0**

Table S2: Survival of antibody treated human stem cell transplanted mice. The table represents the total number of treated human stem cell transplanted mice from all experiments and the number of euthanized mice per treatment group.