Supplementary figure legends

Supplemental Figure 1 Identification of AML specific clone 2K23. Representative examples of binding of the mini-culture 2K23 supernatant to the AML cell lines Molm13, MonoMac6 and THP-1. 2K23 supernatant did not bind to fibroblasts or the colon cell line Caco2.

Supplemental Figure 2 Absence of binding to non-myeloid malignancies. Representative examples of 2 experiments are shown. PA039 and CA081 are malignant cells obtained from newly diagnosed multiple myeloma or colon cancer patients in our clinic. HE081 are non-malignant cells isolated from colon and ileum resection material of a colon cancer patient. Grey filled histograms: AT1002.

Supplemental Figure 3 Expression and pulldown confirmation. (A) Expression of CD43-Flag THP-1 truncations is confirmed with the input lysates in Westernblot. Staining: CD43 intracellular (Novus). (B) Pulldown confirmation of the AT1413 IP. Immunoblot performed with anti CD43 (Novus) demonstrating pulldown of endogenous CD43 in all samples and truncated CD43 up to region F (G).

Supplemental Figure 4 Epitope of AT1413. The amino acid sequence of the CD43 protein with the signaling peptide in bold and the starting amino acid of truncated versions A-K in red bold. The transmembrane part of the protein is in bold italics and the epitope of AT1413 is underlined.

Supplemental Figure 5 CD43s is a novel epitope. The expression of CD43 is present in all CD43 mutants as is shown in the upper panel Staining: CD43 intracellular (Novus). Immunoblotting with Mem59 and DF-T1 shows that these antibodies bind an identical region on CD43, located between amino acids 59-82 and present on truncations A, B and C.

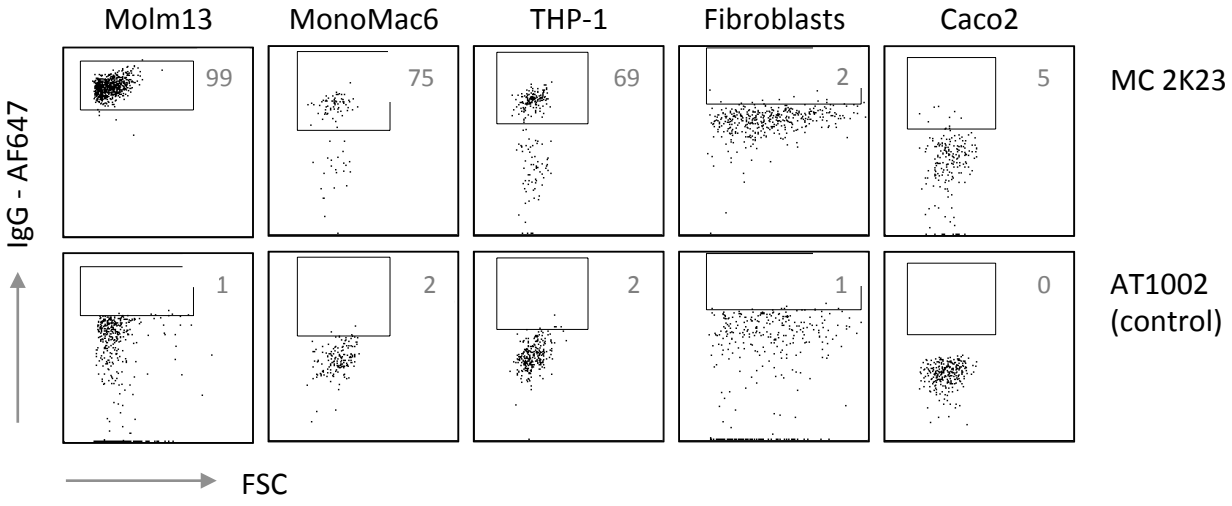
Supplemental Figure 6 Interaction of AT1413 with mouse cells. FACS staining of mouse aorta endothelial cells (MAEC), human aortic endothelial cells (HAEC) and

SH2 cells with AT1413.

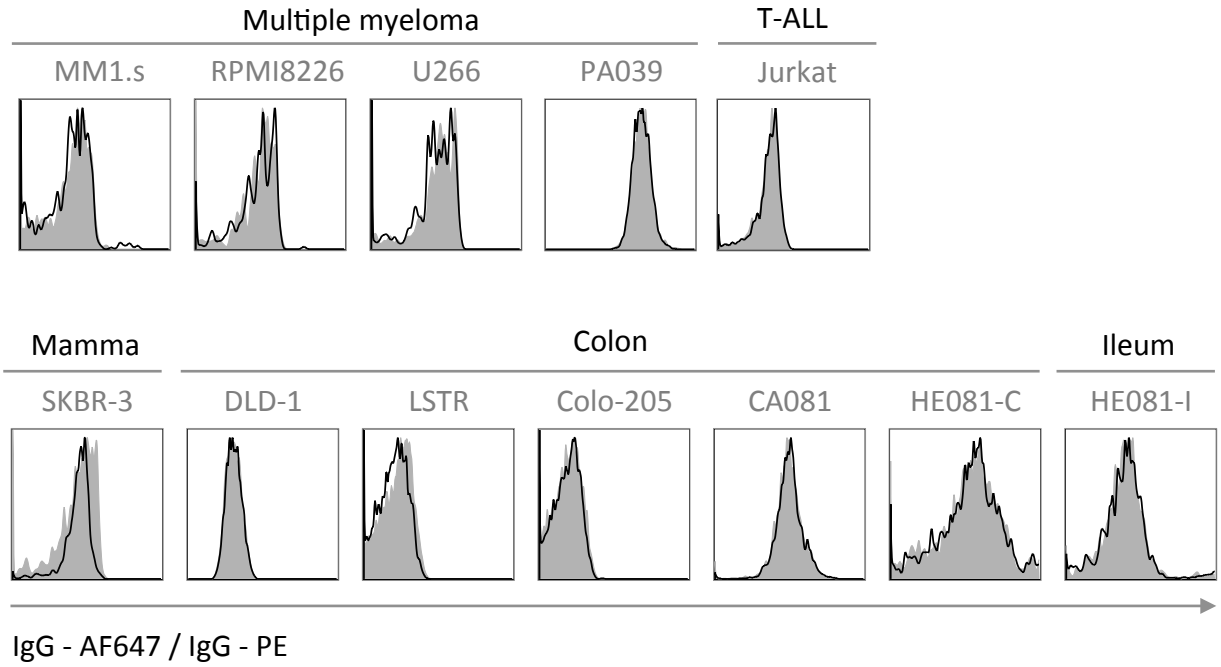
Supplemental Figure 7 Transient weight loss of mice treated with AT1413. Weight was set at 100% at the start of treatment (day 19 after AML inoculation).

Supplemental Figure 8 AT1413 treatment of non-humanized NSG mice with human AML. Female non-humanized NSG mice were inoculated with 10^7 luciferase labeled SH2 cells via tail vein injection. Mice were treated with the AML antibody AT1413 or with an influenza specific antibody (AT1002) twice a week, from day 19 to day 35.

Supplemental Figure 1 Identification of AML specific clone 2K23



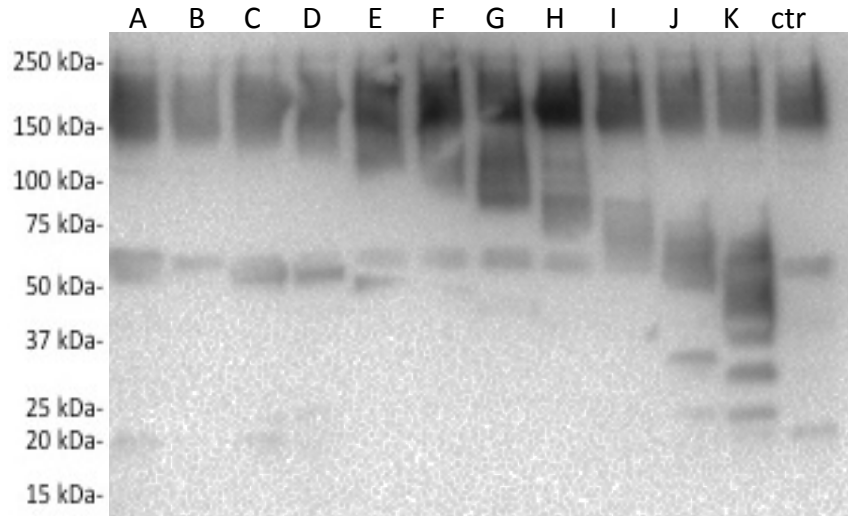
Supplemental Figure 2 Absence of binding to non-myeloid malignancies



Supplemental Figure 3 Expression and pulldown confirmation

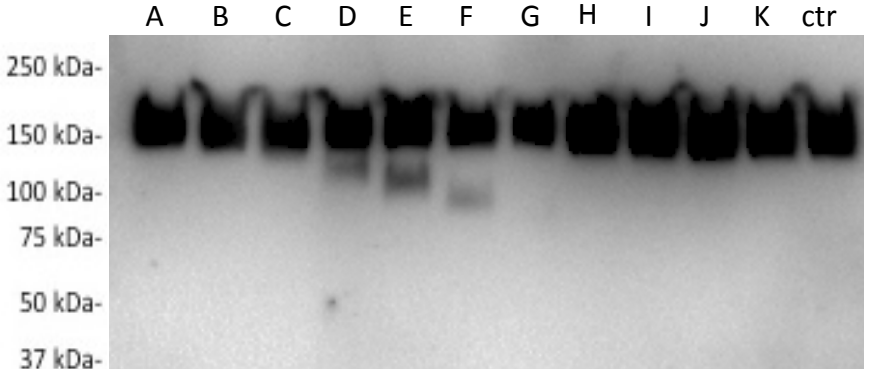
A

CD43-Flag THP1 truncations
input lysates

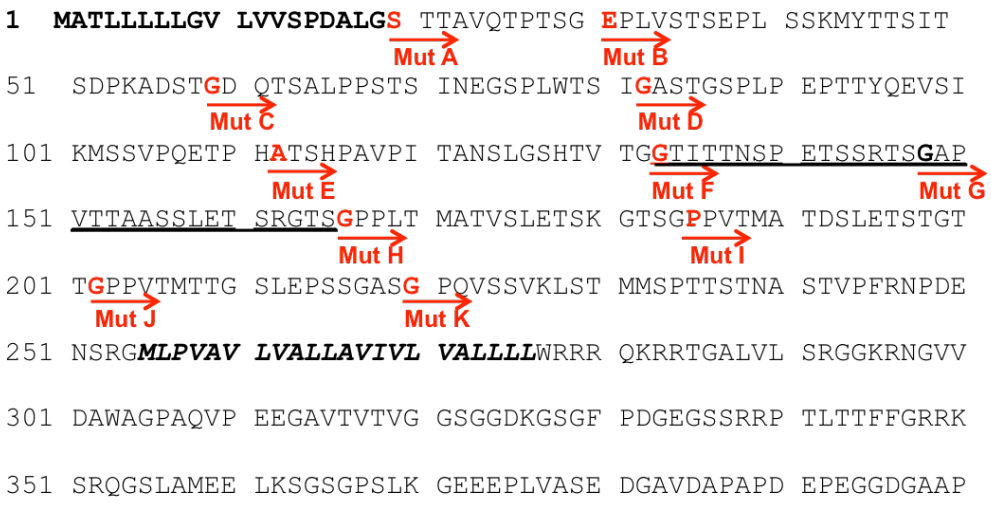


B

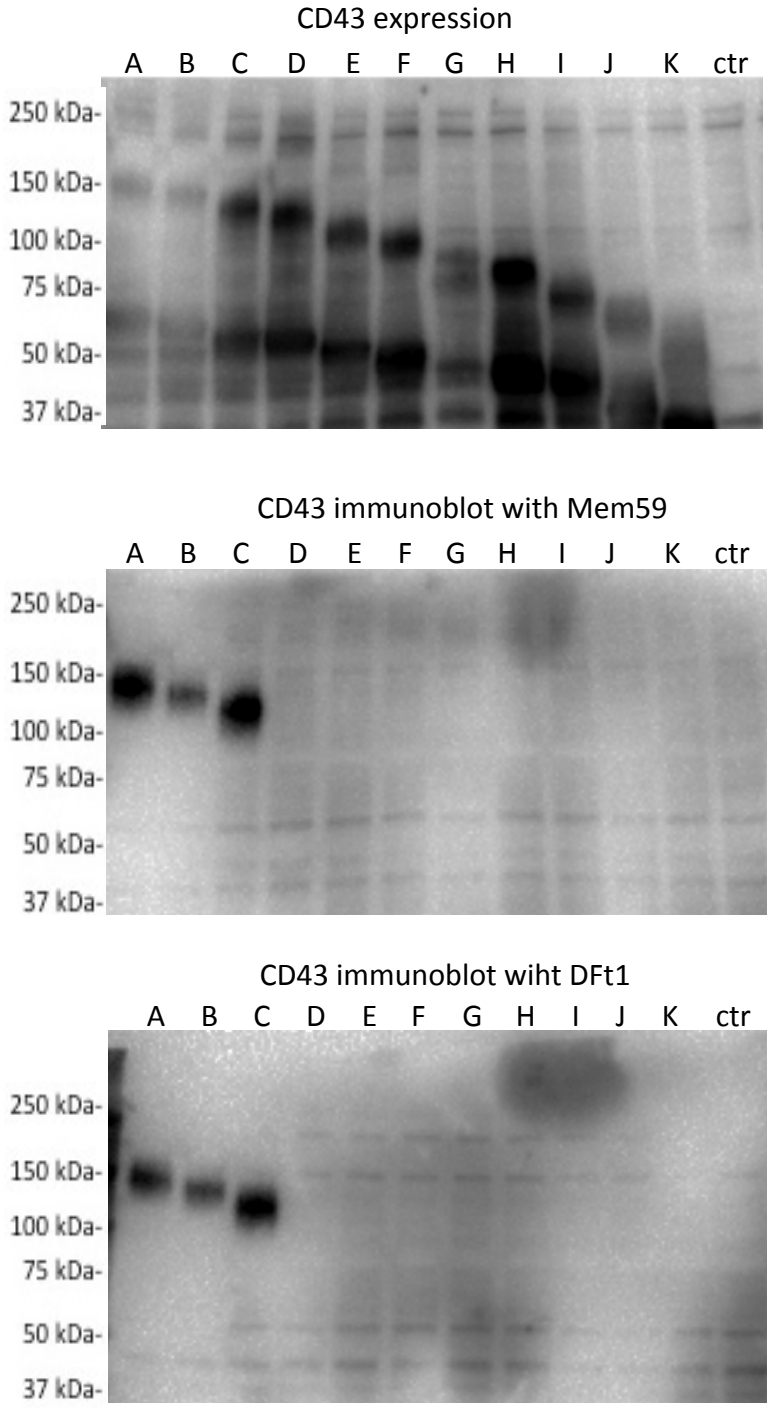
a-CD43 cyto
CD43-Flag THP1 truncations
AT14-13 IP elute



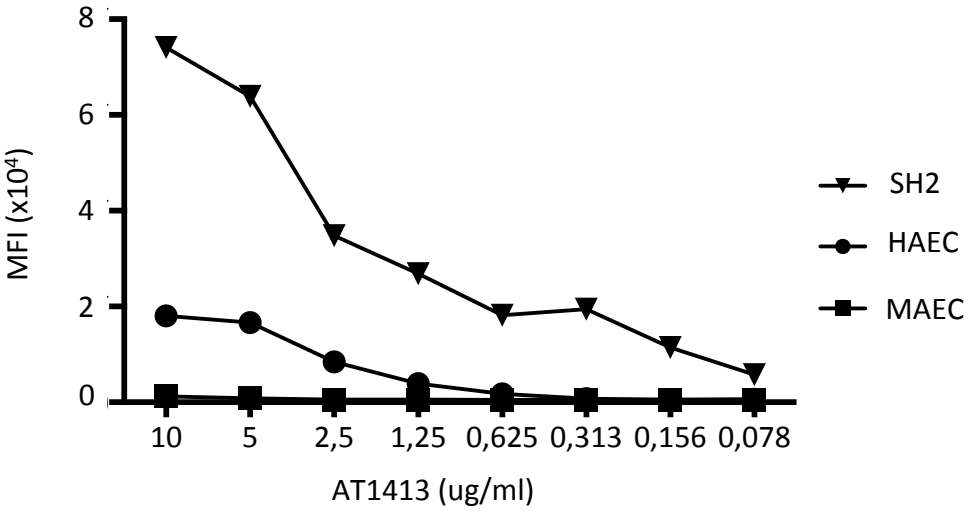
Supplemental Figure 4 Epitope of AT1413



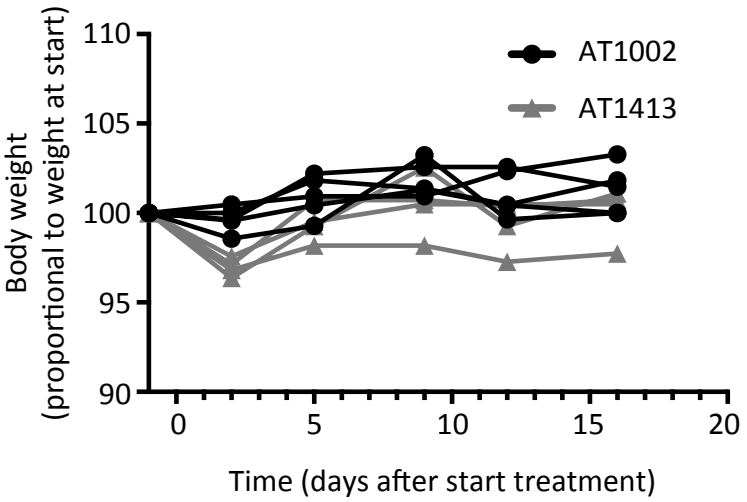
Supplemental Figure 5 CD43s is a novel epitope



Supplemental Figure 6 Interaction of AT1413 with mouse cells



Supplemental Figure 7 Transient weight loss of mice treated with AT1413



Supplemental Figure 8 AT1413 treatment of non-humanized NSG mouse with AML