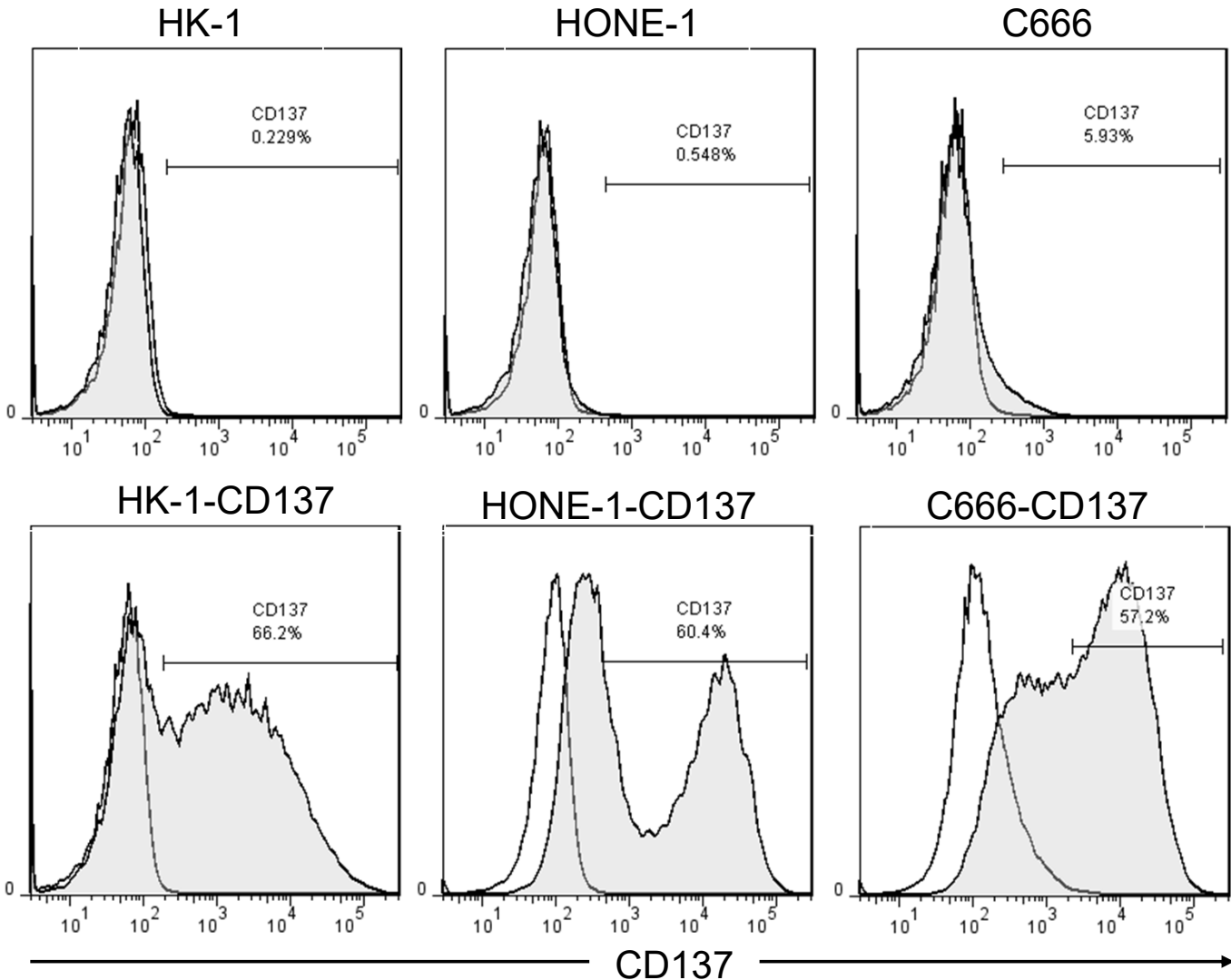


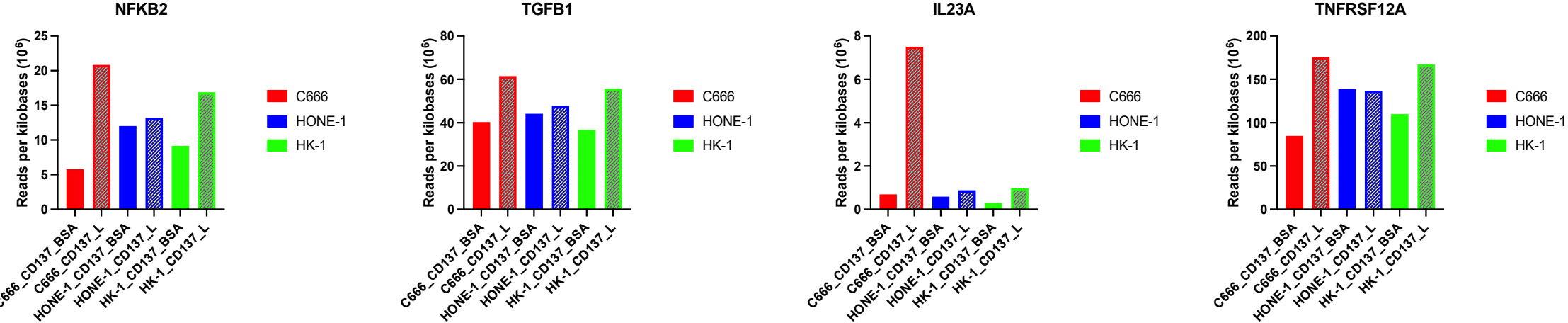
Supplementary Figure 1



□ isotype
■ α -CD137

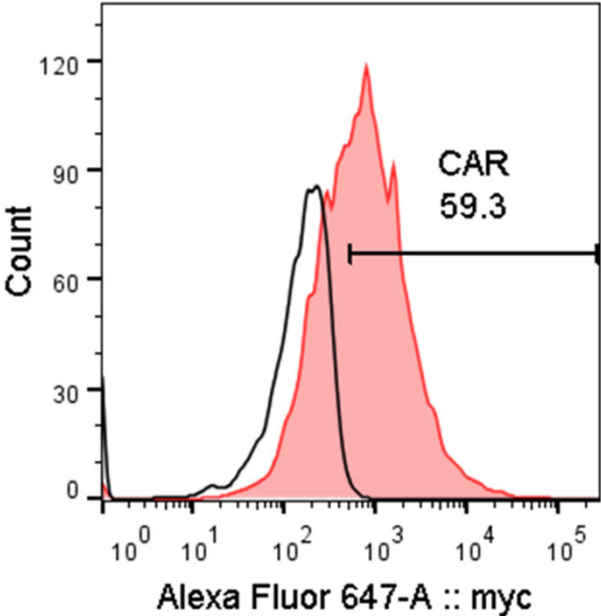
Supplementary Figure 1. Upper row: Parental NPC cell lines. Lower row: NPC cell lines were transfected with an expression vector for full-length CD137, and stable cell lines were established by Blasticidin selection (for HONE-1 and HK-1) and cell sorting for CD137. CD137 expression was quantified by flow cytometry. White histograms: isotype control. Grey histograms: Anti-CD137.

Supplementary Figure 2



Supplementary Figure 2. CD137-expressing C666, HONE-1 and HK-1 cells were seeded on BSA or rCD137L-coated plates for 24 h. RNA was extracted and sequenced. Depicted are the levels of differentially regulated genes in the 3 NPC cell lines.

Supplementary Figure 3



Supplementary Figure 3. Expression of the anti-CD137-CAR. The NK cell line KHYG-1 was transduced to express myc-tagged anti-CD137-CAR which was detected by flow cytometry using an anti-myc tag antibody. White histogram: non-transduced cells. Red histogram: transduced cells. The number in the histogram indicates percentage of positive cells.

Supplementary Table 1

Symbol	log2FoldChange	p value
IL1R2	2.69	0.00055
TGFB1	0.48	0.00464
NFKB2	0.95	0.00541
IL23A	2.58	0.00667
LAMC2	1.10	0.03829

Supplementary Table 1. Listed are log2-fold changes of selected genes from Figure 4A