

**Table S5. Establishment of CRISPR cell models used in this study**

Name	Stably express transfected DNA constructs
MDA-MD-231+1922	KRAB-Spdcas9, PiggyBac-Tre3g-KRAB-dcas9(Bstx1)-2NLS-p2A-sfGFP-SV40polyA/R (EF1a-Zeocin-f2A-rtTA-1)
HEK293T+1922	KRAB-Spdcas9, PiggyBac-Tre3g-KRAB-dcas9(Bstx1)-2NLS-p2A-sfGFP-SV40polyA/R (EF1a-Zeocin-f2A-rtTA-1)
MDA-MD-231+1932	VPR-Spdcas9, PiggyBac-Tre3g-dcas9-VRP- sfGFP- SV40polyA/R (EF1a-Zeocin-f2A-rtTA-1)
HEK293T+1932	VPR-Spdcas9,PiggyBac-Tre3g-dcas9-VRP- sfGFP- SV40polyA/R (EF1a-Zeocin-f2A-rtTA-1)
HEK293T+1922-gRNA	pSLQ1922+pSLQ2837-CRISPRi gRNA
HEK293T+1932-gRNA	pSLQ1932+pSLQ2837-CRISPRa gRNA
MDA-MD-231+1922-gRNA	pSLQ1922+pSLQ2837-CRISPRi gRNA
MDA-MD-231+1932-gRNA	pSLQ1932+pSLQ2837-CRISPRa gRNA