

Supplementary Figure Legends

Supplementary Figure 1: Use of RNA destabilizing elements for gene silencing

The ZFN-induced DSB is repaired by NHEJ or HR. If an exogenous repair template is provided, HR can be used for site-specific integration of additional sequence elements, e.g. RNA destabilizing elements (RDEs).

Supplementary Figure 2: RDE silencing efficiency in Huh7 cells

Different poly(A) signals were tested for their silencing potency in an *in vitro* combinatorial approach. Huh7 cells were transfected with plasmids containing combinations of poly(A) signals. Expression of *GFP* mRNA and vector derived RNA was determined via qRT-PCR: low vector encoded RNA expression indicated a strong silencing efficiency.

Supplementary Figure 3: *MALAT1* expression in single cell clones after poly(A) integration

Cells-to-Ct qRT-PCR analysis of single cell clones (N=982) determining *MALAT1* expression. Most clones show an expression comparable to wildtype cells (first column). When a poly(A) signal was present, clones with less than 1% *MALAT1* expression were obtained (see columns 4, 8 and 9).

Supplementary Tables

Supplementary Table 1: *MALAT1* siRNAs

siRNA	sequence
1	AGGTAAAGCTTGAGAAGAT
2	GGAAGTAATTCAAGATCAA
3	GAGCAAAGGAAGTGGCTTA
4	GCAAATGAAAGCTACCAAT
5	GCCGAAATAAATGAGAGAT
6	GCGGAAGCTGATCTCCAAT
7	GGACGGGGTTCAAATCCCT

Supplementary Table 2: *MALAT1* knockdown approaches and efficiencies

siRNA/ASO/shRNA target sequence	Remaining <i>MALAT1</i>	Cell line	Reference
5'GCAGAGGCATTTATCCTT (siRNA)	9-20%	BeWo; JAR; JEG-3	Tseng et al. (Mol. Hum. Reprod.; 2009)
5'GACCTTGAAATCCATGACG 5'GAAGCCGAAATAAATGAGA 5'GGTCAAGAGAAGTGTGACG (shRNAs)	~9% ~20% ~32%	CaSki	Guo et al. (Acta Biochim Biophys Sin; 2010)
5'GGGAGTTACTTGCCAACTTG 5'ATGGAGGTATGACATATAAT (ASO)	15% 10%	HeLa	Tripathi et al. (Mol Cell; 2010)
5'ATGCAAAAACATTAAGTTGG (ASO)	41%	Neuro2A	Bernard et al. (EMBO Journal; 2010)
5'GATCCATAATCGGTTTCAAGG 5'CACAGGGAAAGCGAGTGGTTGGTAA (siRNAs)	<30% <20%	A549	Tano et al. (FEBS Letters; 2010)
5'GATCCATAATCGGTTTCAAGG 5'CACAGGGAAAGCGAGTGGTTGGTAA	~38% ~20%	HepG2	Lai et al. (Med Oncol; 2011)

Supplementary Table 3: Primer used for cloning of integration constructs

Element	Forward	Reverse
cGFP ORF	ATTAGATATCACCATGGCCAGCAAGGGCGAG	TCGAGCGGCCGCTCACTTGTACAGCTC
CMV	GCCCGGATCCACATTGATTATTGACTAGTTATTAATAG	TAATGATATCGCCAGTAAGCAGTGGGTTC
MALAT1 left arm +TATA	CATCAAGCTTCTTTAAAAGGCCACTTGAACCTCG	TAGTGGATCCATGCCTACCGCACAGCTC
MALAT1 left arm w/oTATA	CATCAAGCTTCTTTAAAAGGCCACTTGAACCTCG	TAGTGGATCCGACGGAGAACAACCTCGCAT
MALAT1 right arm	ACTGGCGGCCGCGCTGTGCGGTAGGCATTG	GCCGCTCGAGAGTTTGTACATTTTGCCTTAGCTTTTGG
IL2RG left arm part1	GCCCAAGCTTAAGTAGGGCTAAAGGATTCAACCAG	ATTAGGATCCCCTTAATGGCTTCCTTTTG
IL2RG left arm part2	ATTAGGATCCAGAGGGGAGGCATTAGAT	ATTAGGATCCAAGCGGCTCCGAACACGAAACG
IL2RG right arm	ATTAGAATTCACCTCTGTGGAATGCTCAGCAT	ATTACTCGAGTGTCTCATCTTTACTCTAAAGACC
bGH signal only	ACTGGCGGCCGCGGTACCCGACTGTGCCTTCTAGTTGCCAG	TCGAGCGGCCGCGAATCCCATAGAGCCCACCGCAT
SV40 signal only	ACTGGCGGCCGCGGTACCTGATCATAATCAGCCATA	TCGAGCGGCCGCGAATTCTAAGATACATTGATGAGTTTGG
Puro-SV40	ATTAGATATCACCATGACCGAGTACAAGCCAC	GCCCCAGTGTGATGGTAAGATACATTGATGAG
bGH+SV40	ATTACCATCAGCTGGCGACTGTGCCTTCTAG	ATTAGCGGCCGCATAGAGCCCACC
bGH+bGH	TGCAGATATCCGACTGTGCCTTCTAGTTGCCAG	ATATCCAGTGTGATGGCCATAGAGCCCACCGCAT
SV40+SV40	GATATCCATCAGCTGGTGATCATAATCAGCCATACCA	ACTGGCGGCCGCTAAGATACATTGATGAGTTTGG
masRNA	TCGAGCGGCCGCGATTTCGTAGTAGGGTTGT	TCGAGCGGCCGCTCAGCTACCATACCCAGAG

Supplementary Table 4: Primer used in RT-PCR and qRT-PCR

Gene	Forward	Reverse
<i>ACTB</i>	TCAAGATCATTGCTCCTCCTGAG	ACATCTGCTGGAAGGTGGACA
<i>GAPDH</i>	CTGGTAAAGTGGATATTGTTGCCAT	TGGAATCATATTGGAACATGTAAACC
<i>RPLP0</i>	GGCGACCTGGAAGTCCAAC	CCATCAGCACACAGCCTTC
<i>RN7SL1</i>	ATCGGGTGTCCGACTAAGTT	CAGCACGGGAGTTTTGACCT
<i>MALAT1</i> upstream	AGAGAGGTGGGAAAGGAAGAC	AACTTCTCGGTCGCTACTCTG
<i>MALAT1</i> 5'end	GAATTGCGTCATTTAAAGCCTAGTT	GTTTCATCCTACCACTCCCAATTAAT
<i>MALAT1</i> 3'end	AAAGCAAGGTCTCCCCACAAG	GGTCTGTGCTAGATCAAAAGGCA
<i>cGFP</i>	ACATGAAGCAGCAGCACTTCT	CTCCATCTTATTGCCCAGGAT
<i>IL2RG</i>	TTTTTCTTCTCCCTCAGTCTGG	AGGGTAGATGGAAAGAGGAAGG
pCRII- TOPO	AACGTCGTGACTGGGAAAAC	GGCCTCTTCGCTATTACGC

Supplementary Table 5: Expected PCR product sizes for MALAT1 genotyping

Integration construct	Product size
-	393 bp
GFP	1113 bp
GFP-bGH	1341 bp
GFP-SV40+bGH	1570 bp
CMV-GFP	1716 bp
CMV-GFP-bGH	1944 bp
CMV-GFP-SV40+bGH	2173 bp

Supplementary Table 6: Sequences of integration modules

CMV promoter:

ACATTGATTATTGACTAGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCATATATGGAGT
TCCGCGTTACATAACTTACGGTAAATGGCCCGCTGGCTGACCGCCCAACGACCCCCGCCATTGACGTCA
ATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCATTGACGTCAATGGGTGGACTATTTACG
GTAAACTGCCCACTTGGCAGTACATCAAGTGTATCATATGCCAAGTACGCCCCCTATTGACGTCAATGACG
GTAAATGGCCCGCTGGCATTATGCCCAGTACATGACCTTATGGGACTTTCCTACTTGGCAGTACATCTAC
GTATTAGTCATCGCTATTACCATGGTGATGCGGTTTTGGCAGTACATCAATGGGCGTGGATAGCGGTTTG
ACTCACGGGGATTTCGAAGTCTCCACCCCATTGACGTCAATGGGAGTTTGTGTTTGGCACCAAAATCAACGG
GACTTTCAAAATGTCGTAACAACCTCCGCCCCATTGACGCAAATGGGCGGTAGGCGTGTACGGTGGGAG
GTCTATATAAGCAGAGCTCTCTGGCTAACTAGAGAACCCACTGCTTACTGGC

cGFP ORF:

ATGGCCAGCAAGGGCGAGGAGCTGTTACCGGCGTGGTGCCCATCCTGGTGGAGCTGGACGGCGATGT
GAATGGCCACAAGTTCAGCGTGAGCGGCGAGGGCGAGGGCGATGCCACCTACGGCAAGCTGACCCTGA
AGTTCATCTGCACCAACGGCAAGCTGCCTGTGCCCTGGCCACCCTGGTGACCACCCTGAGCTACGGCGT
GCAGTGCTTCTCAGCTACCCGATCAGATGAAGCAGCACGACTTCTTCAAGAGCGCCATGCCTGAGGGC
TACATCCAGGAGCGCACCATCTTCTCGAGGATGACGGCAACTACAAGTCGCGCGCCGAGGTGAAGTTC
GAGGGCGATACCCTGGTGAATCGCATCGAGCTGACCGGCACCGATTTCAGGAGGATGGCAACATCCTG
GGCAATAAGATGGAGTACAACGCCCCACAATGTGTACATCATGACCGACAAGGCCAAGAATGGC
ATCAAGGTGAAGTTCAGATCCGCCACAACATCGAGGATGGCAGCGTGACGTGGCCGACCACTACCAG
CAGAATACCCCATCGGCGATGGCCCTGTGCTGCTGCCCGATAACCACTACCTGTCCACCCAGAGCGCCCT
GTCCAAGGACCCCAACGAGAAGCGCGATCAGATGATCCTGCTGGAGTTCGTGACCGCCGCGGCATCAC
CCACGGCATGGACGAGCTGTACAAGTGA

bGH site:

CGACTGTGCCTTCTAGTTGCCAGCCATCTGTTGTTTGGCCCTCCCCCGTGCCTTCCTTGACCCTGGAAGGTG
CCACTCCCACTGTCTTTCTAATAAAATGAGGAAATTGCATCGCATTGTCTGAGTAGGTGTATTCTATTC
TGGGGGGTGGGGTGGGGCAGGACAGCAAGGGGGAGGATTGGGAAGACAATAGCAGGCATGCTGGGG
ATGCGGTGGGCTCTATGG

SV40 PA terminator:

TGATCATAATCAGCCATACCACATTTGTAGAGGTTTTACTTGCTTTAAAAAACCTCCACACCTCCCCCTGA
ACCTGAAACATAAAATGAATGCAATTGTTGTTGTTAACTTGTGTTATTGCAGCTTATAATGGTTACAAATAA
AGCAATAGCATCACAATTTACAAATAAAGCATTTTTTTTACTGCATTCTAGTTGTGGTTTGTCCAAACTC
ATCAATGTATCTTA

mouse mascRNA-fragment (sense):

GATTCGTCAGTAGGGTTGTAAAGGTTTTCTTTCTGAGAAAACAACCTTTTGTTTTCTCAGGTTTTGCTT
TTTGGCCTTTCCCTAGCTTTAAAAAAGCAAAAGACGCTGGTGGCTGGCACTCCTGGTTCCAGG
ACGGGGTTCAAGTCCCTGCGGTGTCTTTGCTTGACTCTTATATCATGAGGCCATTACATTTTCTTGAGG
GTTCTAAAGGCTCTGGGTATGGTAGCTGA

***MALAT1* left homology arm w/o TATA:**

CTTTAAAAGGCCACTTGAACCTCGCTTTCCATGGCGATTTGCCTTGAGCACTTTCAGGAGAGCCTGGAAG
CTGAAAAACGGTAGAAAAATTTCCGTGCGGGCCGTGGGGGGCTGGCGGCAACTGGGGGGCCGCAGATC
AGAGTGGGCCACTGGCAGCCAACGGCCCCCGGGGCTCAGGCGGGGAGCAGCTCTGTGGTGTGGGATTG
AGGCGTTTTCCAAGAGTGGGTTTTACGTTTCTAAGATTTCCCAAGCAGACAGCCCGTGCTGCTCCGATTT
CTCGAACAAAAAAGCAAAACGTGTGGCTGTCTTGGGAGCAAGTCGCAGGACTGCAAGCAGTTGGGGGA
GAAAGTCCGCCATTTTGCCACTTCTCAACCGTCCCTGCAAGGCTGGGGCTCAGTTGCGTAATGGAAAGTA
AAGCCCTGAACATCACACTTTAATCTTCTTCAAAAGGTGGTAACTATACCTACTGTCCCTCAAGAGAA
CACAAGAAGTGCTTTAAGAGGTATTTAAAAGTTCGGGGGTTTTGTGAGGTGTTTGATGACCCGTTTAA
AATATGATTTCCATGTTTCTTTGTCTAAAGTTTGAGCTCAAATCTTCCACACGCTAGTAATTTAAGTATT
TCTGCATGTGTAGTTTGCATTCAAGTTCATAAGCTGTTAAGAAAAATCTAGAAAAGTAAACTAGAACCT
ATTTTAAACCGAAGAACTACTTTTTGCCTCCCTCACAAAGGCGGCGGAAGGTGATCGAATTCGGTGATG
CGAGTTGTTCTCCGTC

***MALAT1* left homology arm with TATA:**

CTTTAAAAGGCCACTTGAACCTCGCTTTCCATGGCGATTTGCCTTGAGCACTTTCAGGAGAGCCTGGAAG
CTGAAAAACGGTAGAAAAATTTCCGTGCGGGCCGTGGGGGGCTGGCGGCAACTGGGGGGCCGCAGATC
AGAGTGGGCCACTGGCAGCCAACGGCCCCCGGGGCTCAGGCGGGGAGCAGCTCTGTGGTGTGGGATTG
AGGCGTTTTCCAAGAGTGGGTTTTACGTTTCTAAGATTTCCCAAGCAGACAGCCCGTGCTGCTCCGATTT
CTCGAACAAAAAAGCAAAACGTGTGGCTGTCTTGGGAGCAAGTCGCAGGACTGCAAGCAGTTGGGGGA
GAAAGTCCGCCATTTTGCCACTTCTCAACCGTCCCTGCAAGGCTGGGGCTCAGTTGCGTAATGGAAAGTA
AAGCCCTGAACATCACACTTTAATCTTCTTCAAAAGGTGGTAACTATACCTACTGTCCCTCAAGAGAA
CACAAGAAGTGCTTTAAGAGGTATTTAAAAGTTCGGGGGTTTTGTGAGGTGTTTGATGACCCGTTTAA
AATATGATTTCCATGTTTCTTTGTCTAAAGTTTGAGCTCAAATCTTCCACACGCTAGTAATTTAAGTATT
TCTGCATGTGTAGTTTGCATTCAAGTTCATAAGCTGTTAAGAAAAATCTAGAAAAGTAAACTAGAACCT
ATTTTAAACCGAAGAACTACTTTTTGCCTCCCTCACAAAGGCGGCGGAAGGTGATCGAATTCGGTGATG
CGAGTTGTTCTCCGTCATAAATACGCCTC

***MALAT1* right homology arm:**

GCTGTGCGGTAGGCATTGAGGCAGCCAGCGCAGGGGCTTCTGCTGAGGGGGCAGGCGGAGCTTGAGGA
AACCGCAGATAAGTTTTTTCTTTGAAAGATAGAGATTAATACAACCTACTTAAAAATATAGTCAATAG
GTTACTAAGATATTGCTTAGCGTTAAGTTTTAACGTAATTTAATAGCTTAAGATTTAAGAGAAAAATG
AAGACTTAGAAGAGTAGCATGAGGAAGGAAAAGATAAAAGGTTTCTAAAACATGACGGAGGTTGAGAT
GAAGCTTCTTCATGGAGTAAAAATGTATTTAAAAGAAAATTGAGAGAAAGGACTACAGAGCCCCGAATT
AATACCAATAGAAGGGCAATGCTTTTAGATTAAAATGAAGGTGACTTAAACAGCTTAAAGTTTAGTTTAA
AAGTTGTAGGTGATTAAAATAATTTGAAGGCGATCTTTAAAAGAGATTAAACCGAAGGTGATTAAAAG
ACCTTGAAATCCATGACGCAGGGAGAATTGCGTCATTTAAGCCTAGTTAACGCATTTACTAAACGCAGA
CGAAAATGGAAAGATTAATTGGGAGTGGTAGGATGAAACAATTTGGAGAAGATAGAAGTTTGAAGTGG
AAAACCTGGAAGACAGAAGTACGGGAAGGCGAAGAAAAGAATAGAGAAGATAGGGAAATTAGAAGATA
AAAACATACTTTTAGAAGAAAAAAGATAAATTTAAACCTGAAAAGTAGGAAGCAGAAGAAAAAAGACAA
GCTAGGAAACAAAAAGCTAAGGGCAAAATGTACAACT

***IL2RG* left homology arm:**

AAGTAGGGCTAAAGGATTCAACCAGACAGATAGAAGGACCTAATATCAAGCTCCTGTTCTCTGCCTCCCA
GCTTCTCTGCTCACCCCTACCCTCCCTCCTCCAACCTCTTTCCCCCTATTTTCTCCAGTGAGTTTTCTTTTT
TCTTTTCTTTCTTTCTTTCTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTT
GAGACAGAGCCTCACTCTGTTGCCAGGCTTGAGT
GCAGTGGGGCGATCTTGGGCTCACTGCGACCTCTGTCTCCCTGGTTCAAGTGATTCTCCTGCTTCAGCCTC
CCAAGTAGCTGGGAGCATGCACAACCATGCCTGGCTAATTTTGTATTTTGTAAAGACAGGGTTTTGCC
ATGTTGGTCAGGCTGGTCTTGAACCTCTGACCTCAGGTGATCTGCCCACCTCGGCCTCCCAAAGTGCTGG
GATTACAGGCGTGAGCCACCATTCCTGACACCACTGAGTTTTTCATTAGGGATTCCCTACCCATACTCTTCCT
GATACCAGATAGACAAGTAAACAAAAGGAAGCCATTAAGGGGATCCAGAGGGGAGGCATTAGATTCAA
GTCAGTGAAGGGAGCAGTGTGGCTTGAGTAGTCAAGAGATGAGAGAGAACTGGGCAGTAGCAGAGAT
GACACTGGTGGGTGTTGAGGAGTATGTTTTAATCTCCCTTCTCTCATAGACACCCACTTTCCCTCATCCTC
TTTCTCCTCAAGGAACAATCAGTGGATTATAGACATAAGTTCTCCTTGCCTAGTGTGGATGGGCAGAAAC
GCTACACGTTTCGTGTTCCGGAGCCGCTTT

***IL2RG* right homology arm:**

ACTCTGTGGAAGTGCTCAGCATTGGAGTGAATGGAGCCACCCAATCCACTGGGGGAGCAATACTTCAAA
AGGTAAATGGGCCCACATGACCCAATCCATGAGCCCAACACCCAGCCTTTCTAACACCACTGTCTTTTG
CTCCACTTCCCTGTCACTAAAGCCCCTAAACTTGGTGCCCCATCTCTCCACACTGTCTAACCCCAACCTCTA
GAAATCAAGGTTTTCTGTGTAGGGTTGGTTAGCGTGTGTTAGAGTAGGGGAGTGATTGAGAAGGA
GGCTGAGGGGTACTCAAGGGGGCTATAGAATGTATAGGATTTCCCTGAAGCATTCTAGAGAGCCTGCA
AGGTGAAGATGGCTTTGGAACAGCTGGATCTAGGCTGTGCCACATACTACCTCTTTGGCCTTGCCACA
TCCCTAAACTCTTGGATTCTGTTTCCTAAGATGTAAAGATGGAGGTAATTGTTCTGCCTCACAGGAGCTGT
TGTGAGGATTAACAGAGAGTATGTCTTTAGCGCGGTGCCTGGCACCAGTGCCTGGCATGTAGTAGGGG
CACAAACAAATATAAGGTCCACTTTGCTTTTCTTTTCTATAGAGAATCCTTTCCTGTTTGCATTGGAAGCC
GTGGTTATCTCTGTTGGCTCCATGGGATTGATTATCAGCCTTCTCTGTGTGATTCTGGCTGGAACGGTG
AGATTTGGAGAAGCCCAGAAAAATGAGGGGAACGGTAGCTGACAATAGCAGAGGAGGGTTTTGCAGGG
TCTTTAGGAGTAAAGGATGAGACA

Supplementary Table 7: Sequences of *MALAT1* ZFN

overview ZFN plasmid (Sigma-Aldrich):

CMV promoter – *EcoRI* – 3xFLAG-tag – NLS – *KpnI* – Zinc Finger insert – *BamHI* – Fok-EL/KK –
XbaI – bGH signal

Sequence of ZFP for:

*GAATTC*GCCATGGACTACAAAGACCATGACGGTGATTATAAAGATCATGACATCGATTACAAGGATGACG
ATGACAAGATGGCCCCAAGAAGAAGAGGAAGGTGGGCATCCACGG*GGTACC*GCGCGCTATGGCGGAG
AGGCCCTACGCATGCCCTGTGAGTCCTGCGATCGCCGCTTTTCTAGCAGCGGCGGGCTTAACCGCCATA
TCCGCATCCACACCGGTCAGAAGCCCTTCCAGTGTGCAATCTGCATGCGTAACTTCAGTGACACCAGCCA
CCTGAGCCGCCACATCCGCACCCACACAGGCGGAGGCGGAAGCGAACGGCCCTTCCAGTGTGCAATCT
GCATGCGTAAGTTTGCCCGCTCCAACGACCTGACCCGCCATACCAAGATACACACGGGCGAGAAGCCCT
TCCAGTGTGCAATCTGCATGCGTAACTTCAGTCGCTCCGACAACCTGTCCGAGCACATCCGCACCCACAC
CGGCGAGAAGCCTTTTGCCTGTGACATTTGTGGGAGGAAATTTGCCACCTCCGGCTCCCTGACCCGCCAT
ACCAAGATACACCTGCGG*GGATCC*

Sequence of ZFP rev:

GAATTCGCCATGAGATCTGACTACAAAGACCATGACGGTGATTATAAAGATCATGACATCGATTACAAGG
 ATGACGATGACAAGATGGCCCCAAGAAGAAGAGGAAGGTGGGCATTATGG**GGTACC**CGCCGCTATG
 GCTGAGAGGCCCTTCCAGTGTCTGAATCTGCATGCGTAACCTTCAGTGAGCGCGGCACCCTGGCCGCCAC
 ATCCGCACCCACACCGGCGGAGAAGCCTTTTGCCTGTGACATTTGTGGGAGGAAATTTGCCAGTCCGGC
 GACCTGACCCGCCATACCAAGATACACACGGGCGGACAACGGCCCTTCCAGTGTCTGAATCTGCATGCGT
 AACTTCAGTCGTAGTGACACCCTGAGCGTACACATCCGCACCCACACAGGCGAGAAGCCTTTTGCCTGT
 GACATTTGTGGGAGGAAATTTGCCACAGCAACGCCCGCAAAACCCATACCAAGATACACACGGGATC
 TCAGAAGCCCTTCCAGTGTCTGAATCTGCATGCGTAACCTTCAGTGACCGCTCCACCTGACCCGCCACATC
 CGCACCCACACCGGCGGAGAAGCCTTTTGCCTGTGACATTTGTGGGAGGAAATTTGCCAGTCCGGCTCC
 CTGACCCGCCATACCAAGATACACCTGCGG**GGATCC**

Supplementary Table 8: Overview about ZFN-mediated integration efficiency

Gene	Promoter	RDE	Cell Line	genotyped	no integration	hetero	homo	% none	% hetero	% homo
<i>MALAT1</i>	TATA	-	A549	8	0	3	5	0,0%	37,5%	62,5%
<i>MALAT1</i>	TATA	bGH	A549	67	5	58	4	7,5%	86,6%	6,0%
<i>MALAT1</i>	TATA	SV40-bGH	A549	45	2	33	10	4,4%	73,3%	22,2%
<i>MALAT1</i>	CMV	-	A549	125	20	95	10	16,0%	76,0%	8,0%
<i>MALAT1</i>	CMV	bGH	A549	25	3	19	3	12,0%	76,0%	12,0%
<i>MALAT1</i>	CMV	SV40-bGH	A549	41	1	24	16	2,4%	58,5%	39,0%
<i>IL2RG</i>	CMV	bGH	K562	55	22	26	7	40,0%	47,3%	12,7%
<i>IL2RG</i>	CMV	SV40-bGH	K562	215	32	148	35	14,9%	68,8%	16,3%
Total				581	85	406	90	14,6%	69,9%	15,5%

Note: *MALAT1* clones were partially selected for low *MALAT1* expression which might mask a higher proportion of clones without integration. For *IL2RG*, all viable clones were analyzed for their genotype and *IL2RG* expression level.