FIGURE 1

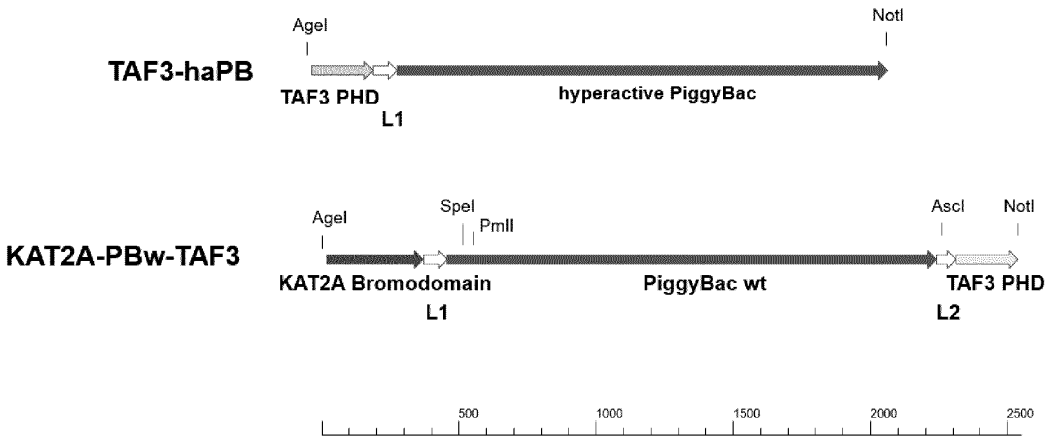

TAF3-haPB
AgeI
NotI
TAF3 PHD
L1
hyperactive PiggyBac
KAT2A-PBw-TAF3
AgeI
SpeI
PmlI
AscI
NotI
KAT2A Bromodomain
L1
PiggyBac wt
TAF3 PHD
L2
500
1000
1500
2000
2500

FIGURE 2a

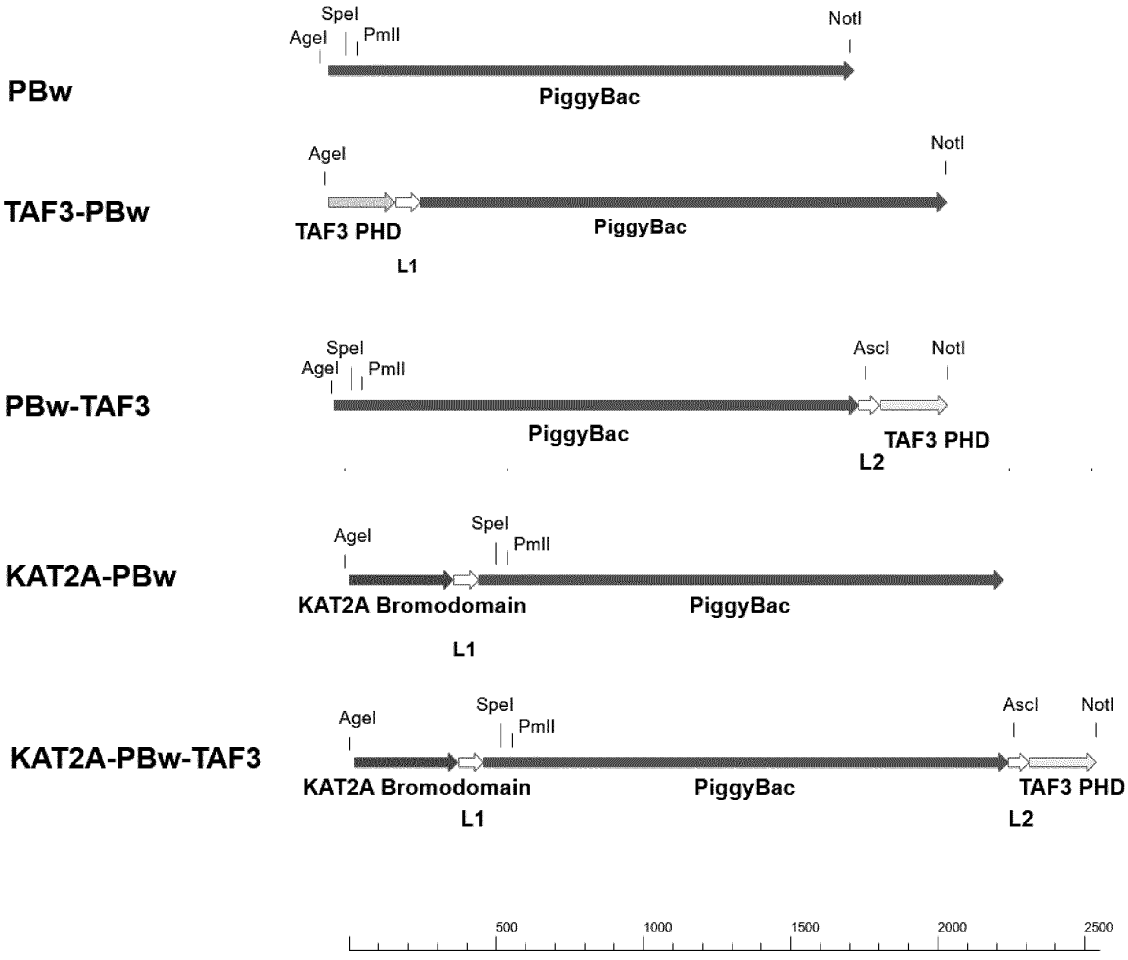

PBw
SpeI
AgeI
PmlI
NotI
PiggyBac
TAF3-PBw
AgeI
NotI
TAF3 PHD
PiggyBac
L1
PBw-TAF3
SpeI
AgeI
PmlI
AscI
NotI
PiggyBac
TAF3 PHD
L2
KAT2A-PBw
AgeI
SpeI
PmlI
KAT2A Bromodomain
PiggyBac
L1
KAT2A-PBw-TAF3
AgeI
SpeI
PmlI
AscI
NotI
KAT2A Bromodomain
PiggyBac
TAF3 PHD
L1
L2
500
1000
1500
2000
2500

FIGURE 2b

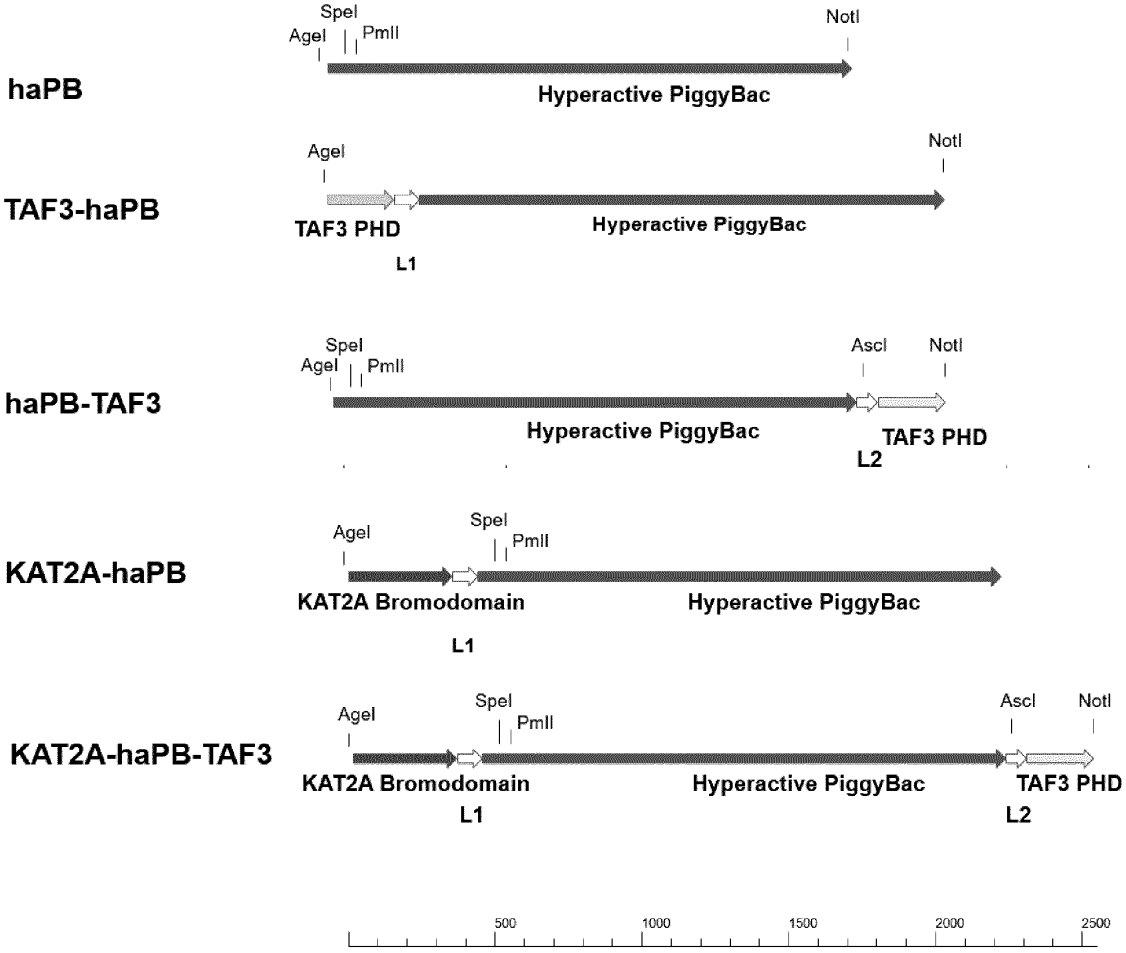

haPB
SpeI
AgeI
PmlI
NotI
Hyperactive PiggyBac
TAF3-haPB
AgeI
NotI
TAF3 PHD
Hyperactive PiggyBac
L1
haPB-TAF3
SpeI
AgeI
PmlI
AscI
NotI
Hyperactive PiggyBac
TAF3 PHD
L2
KAT2A-haPB
AgeI
SpeI
PmlI
KAT2A Bromodomain
Hyperactive PiggyBac
L1
KAT2A-haPB-TAF3
AgeI
SpeI
PmlI
AscI
NotI
KAT2A Bromodomain
Hyperactive PiggyBac
TAF3 PHD
L1
L2
500
1000
1500
2000
2500

FIGURE 3

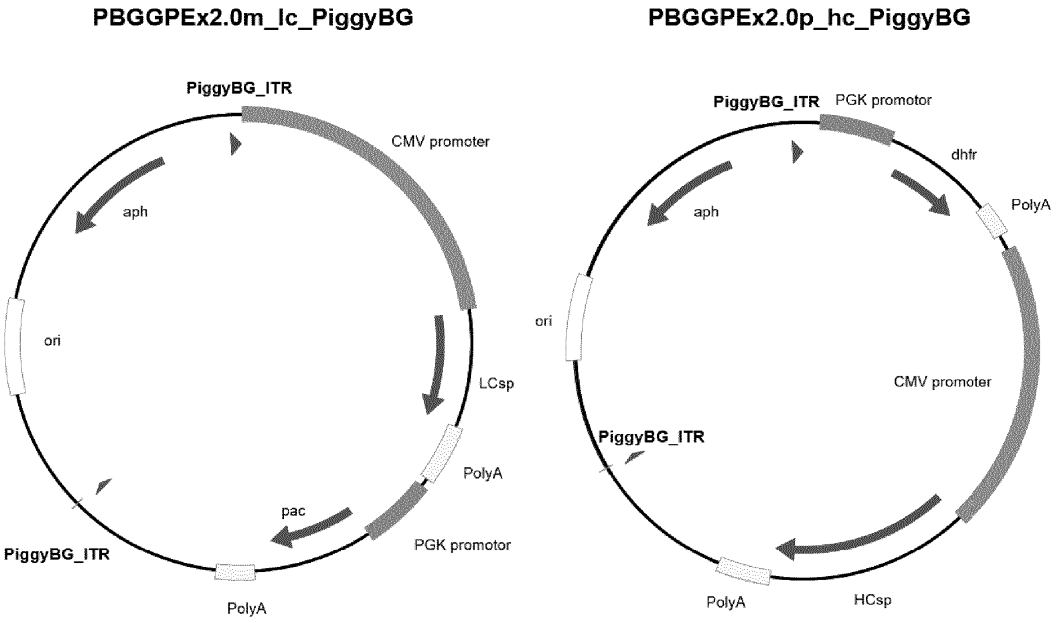

PBGGPEx2.0m_lc_PiggyBG
PiggyBG_ITR
CMV promoter
aph
ori
LCsp
PolyA
pac
PGK promotor
PiggyBG_ITR
PolyA
PBGGPEx2.0p_hc_PiggyBG
PiggyBG_ITR
PGK promotor
dhfr
PolyA
aph
ori
CMV promoter
PiggyBG_ITR
PolyA
HCsp

FIGURE 4

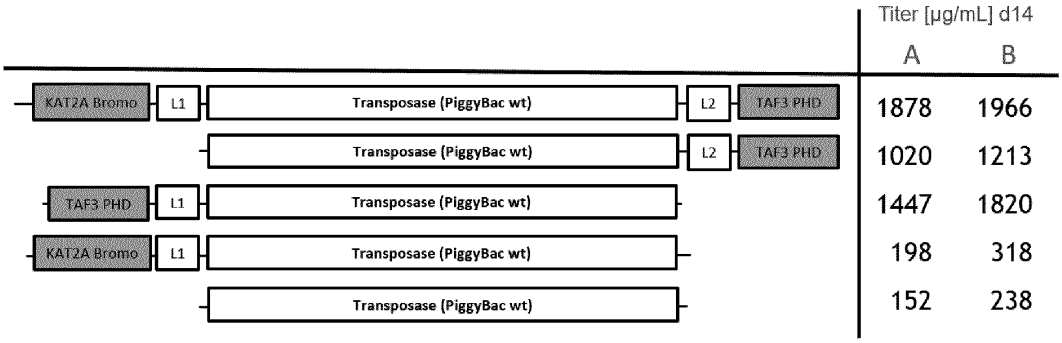


FIGURE 5

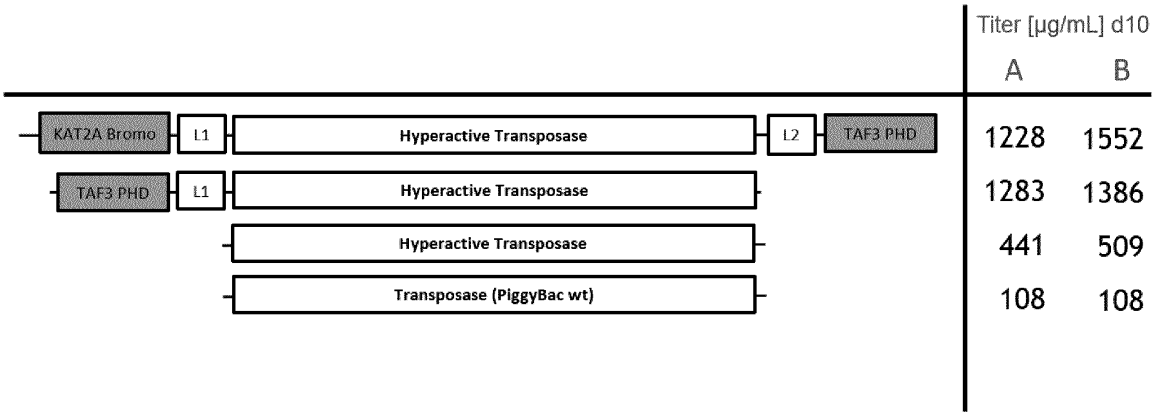


FIGURE 6A

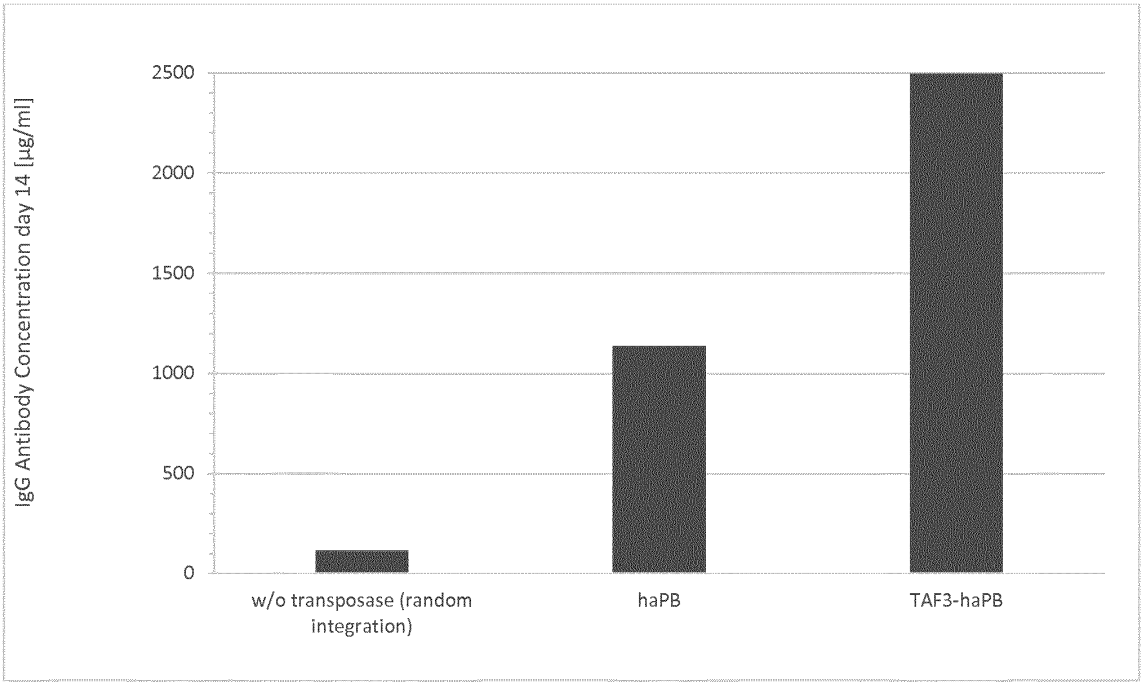

IgG Antibody Concentration day 14 [µg/ml]
2500
2000
1500
1000
500
0
w/o transposase (random integration)
haPB
TAF3-haPB

FIGURE 6B

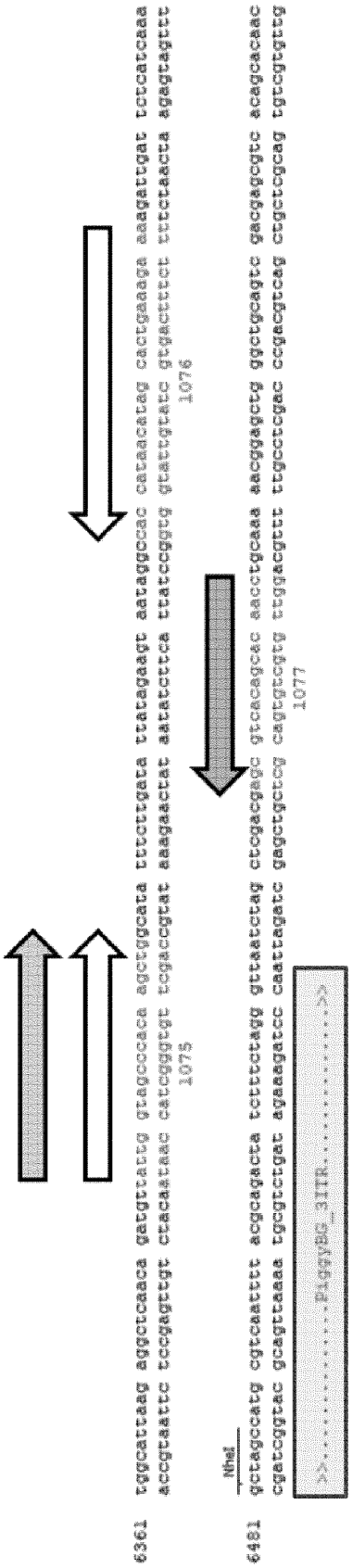
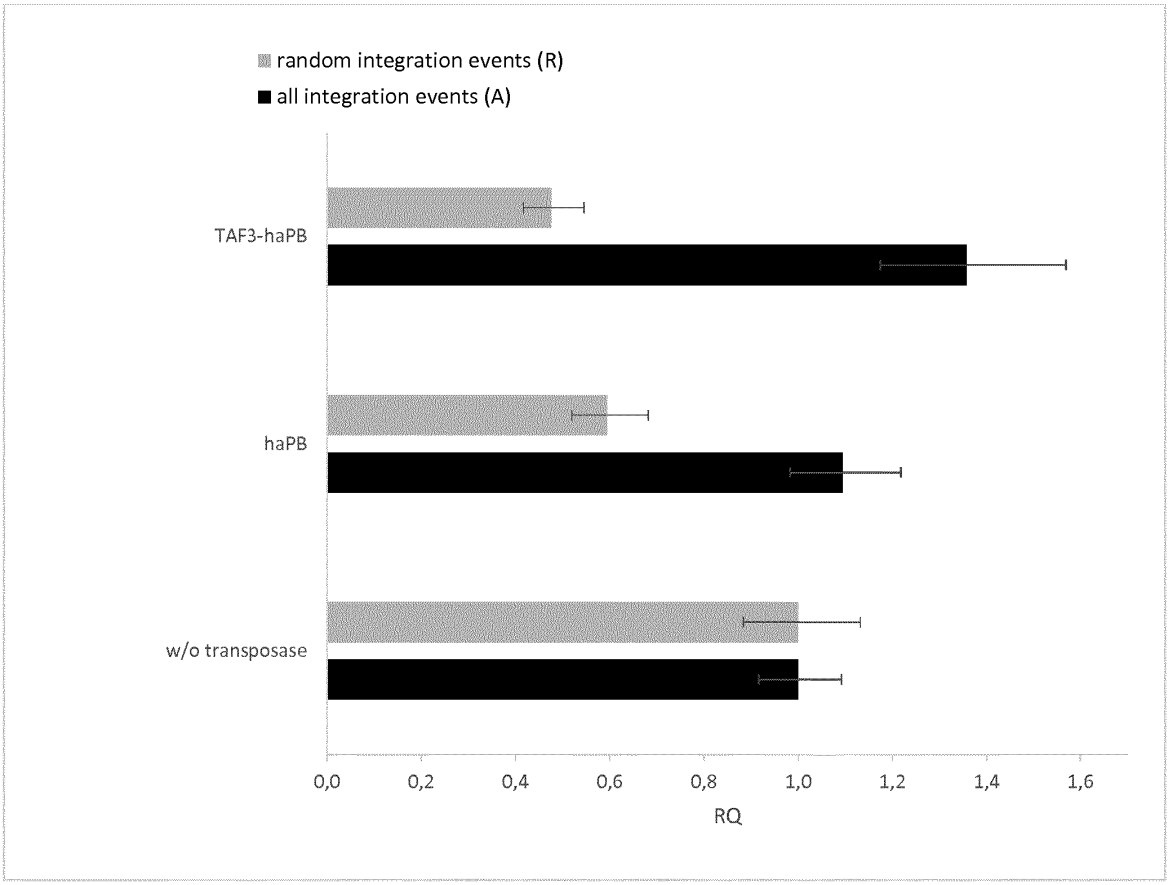

6361 tggcattaag aggctcaaca gatgttattg gtagcccaca agcgggcata tttctgata ttatagaagt aataggccac catacatag cactgaaaga aaagattgat tctcatcaaa
1075
6481 gctagccatg cgtcaatttt acgcagacta tctttctagg gttaatctag ctcgatcgac gtcacagcac aacctgcaaa aacggagctg ggctgcagtc gacgagcgtc acagcacaac
cgatcggtac gcagttaaaa tgcgtctgat agaaagatcc caattagatc gagctgctcg cagtcgtcgt tggacgtttt ttgcctcgac ccgacgtcag ctgctcgcag tgtcgtgttg
1077
NheI
>>.....PiggyBac_3ITR.....>>

FIGURE 6C


random integration events (R)
all integration events (A)
TAF3-haPB
haPB
w/o transposase
0,0
0,2
0,4
0,6
0,8
1,0
1,2
1,4
1,6
RQ