FIG. 1A

pENN.AAV.TBG.PI. 6863 bp DNA circular

FEATURES	Location/Qualifiers
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	/vntifkey="33"
	/label=pUC\origin\of\replication
promoter	442..901
	/vntifkey="29"
	/label=TBG
TATA_signal	885..888
	/vntifkey="41"
	/label=TATA
enhancer	221..320
	/vntifkey="9"
	/label=Alpha\mic/bik
enhancer	327..426
	/vntifkey="9"
	/label=Alpha\mic/bik
intron	1027..1159
	/vntifkey="15"
	/label=Intron_1
	/note="chimeric intron"
polyA_signal	3261..3387
	/vntifkey="25"
	/label=Rabbit\globin\poly\A
repeat_region	1..130
	/vntifkey="34"
	/label=5'\ITR
repeat_region	complement(3476..3605)
	/vntifkey="34"
	/label=3'\ITR
rep_origin	complement(3782..4220)
	/vntifkey="33"
	/label=f1\ori
CDS	1251..3212
	/vntifkey="4"
	/label=Human\alpha-L-IDUA

FIG. 1B

BASE COUNT 1584 a 1971 c 1702 g 1606 t
ORIGIN

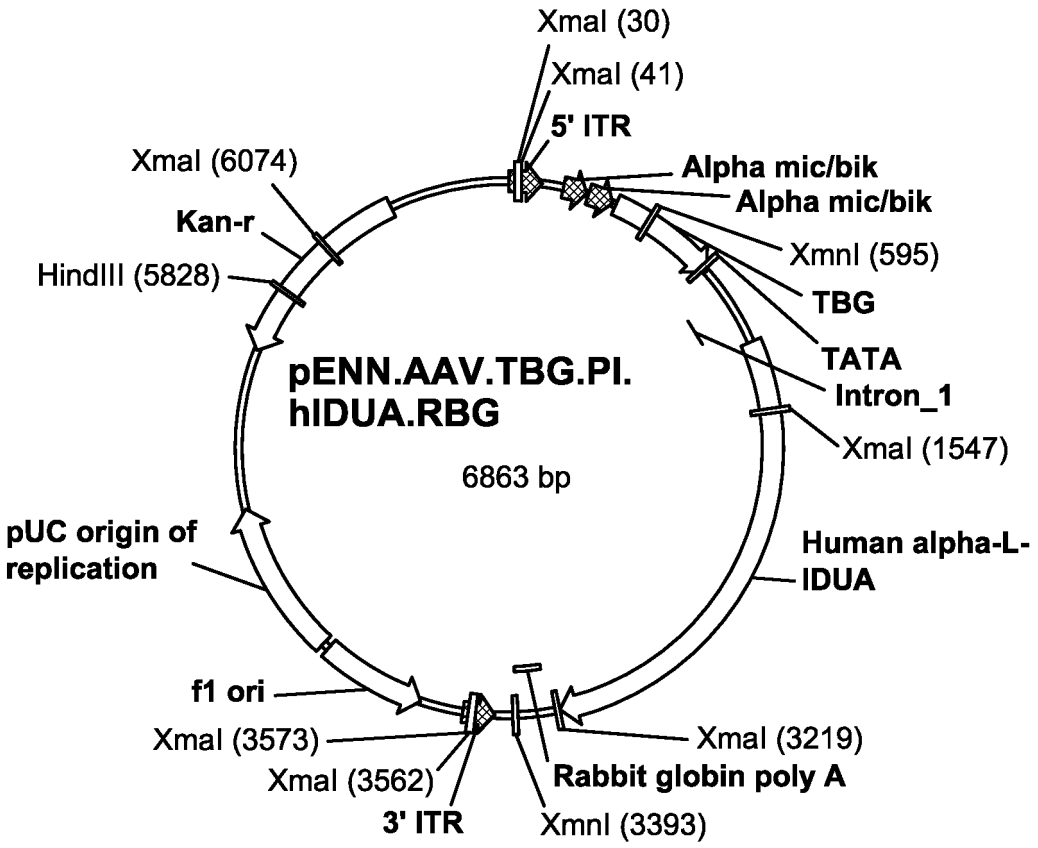
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  61 ggtcgcccgg cctcagtgag cgagcgagcg cgcagagagg gagtggccaa ctccatcact
 121 aggggttcct tgtagttaat gattaacccg ccatgctact tatctaccag ggtaatgggg
 181 atcctctaga actatagcta gaattcgccc ttaagctagc aggttaattt ttaaaaagca
 241 gtcaaaagtc caagtggccc ttggcagcat ttactctctc tgtttgctct ggttaataat
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 541 ctttccctta aaaaactgcc aattccactg ctgtttggcc caatagtgag aacttttttcc
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 661 agcatggact taaacccctc cagctctgac aatcctcttt ctcttttgtt ttacatgaag
 721 ggtctggcag ccaaagcaat cactcaaagt tcaaacctta tcatttttg ctttgttcct
 781 cttggccttg gttttgtaca tcagctttga aaataccatc ccagggttaa tgctggggtt
 841 aatttataac taagagtgct ctagttttgc aatacaggac atgctataaa aatggaaaga
 901 tgttgctttc tgagagacag ctttattgcg gtagtttatc acagttaaat tgctaacgca
 961 gtcagtgctt ctgacacaac agtctcgaac ttaagctgca gaagttggtc gtgaggcact
1021 gggcaggtaa gtatcaaggt tacaagacag gtttaaggag accaatagaa actgggcttg
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2281 ccctgctgag caacgacaac gccttcctga gctaccaccc ccacccccttc gcccagagaa
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2701 acggcgaatg gcgcagactg ggcagacctg tgttccccac cgccgagcag ttccggcgga
2761 tgagagccgc tgaggatcct gtggctgctg cccctagacc tctgcctgct ggcggcagac
```

FIG. 1C

```
2821 tgaccctgag gcccgctctg agactgccta gtctgctgct ggtgcacgtg tgcgccaggc
2881 ccgagaagcc tcccggccag gtgacaagac tgagagccct gcccctgacc cagggccagc
2941 tggtgctggt gtggtccgat gagcacgtgg gcagcaagtg cctgtggacc tacgagatcc
3001 agttcagcca ggacggcaag gcctacaccc ccgtgtcccg gaagcccagc accttcaacc
3061 tgttcgtgtt cagccccgat acaggcgccg tgtccggctc ttatagagtg cgggccctgg
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5581 gagcatcaaa tgaaactgca atttattcat atcaggatta tcaataccat atttttgaaa
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```

FIG. 1D

```
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5821 tggcaaaagc ttatgcattt ctttccagac ttgttcaaca ggccagccat tacgctcgtc
5881 atcaaaatca ctcgcatcaa ccaaaccgtt attcattcgt gattgcgcct gagcgagacg
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6721 ttagctcact cattaggcac cccaggcttt acactttatg cttccggctc gtatgttgtg
6781 tggaattgtg agcggataac aatttcacac aggaaacagc tatgaccatg attacgccag
6841 atttaattaa ggccttaatt agg
```


XmaI (30)
XmaI (41)
5' ITR
Alpha mic/bik
Alpha mic/bik
XmnI (595)
TBG
TATA
Intron_1
XmaI (1547)
Human alpha-L-IDUA
XmaI (3219)
Rabbit globin poly A
XmnI (3393)
3' ITR
XmaI (3562)
XmaI (3573)
f1 ori
pUC origin of replication
XmaI (6074)
Kan-r
HindIII (5828)
pENN.AAV.TBG.PI.hIDUA.RBG
6863 bp