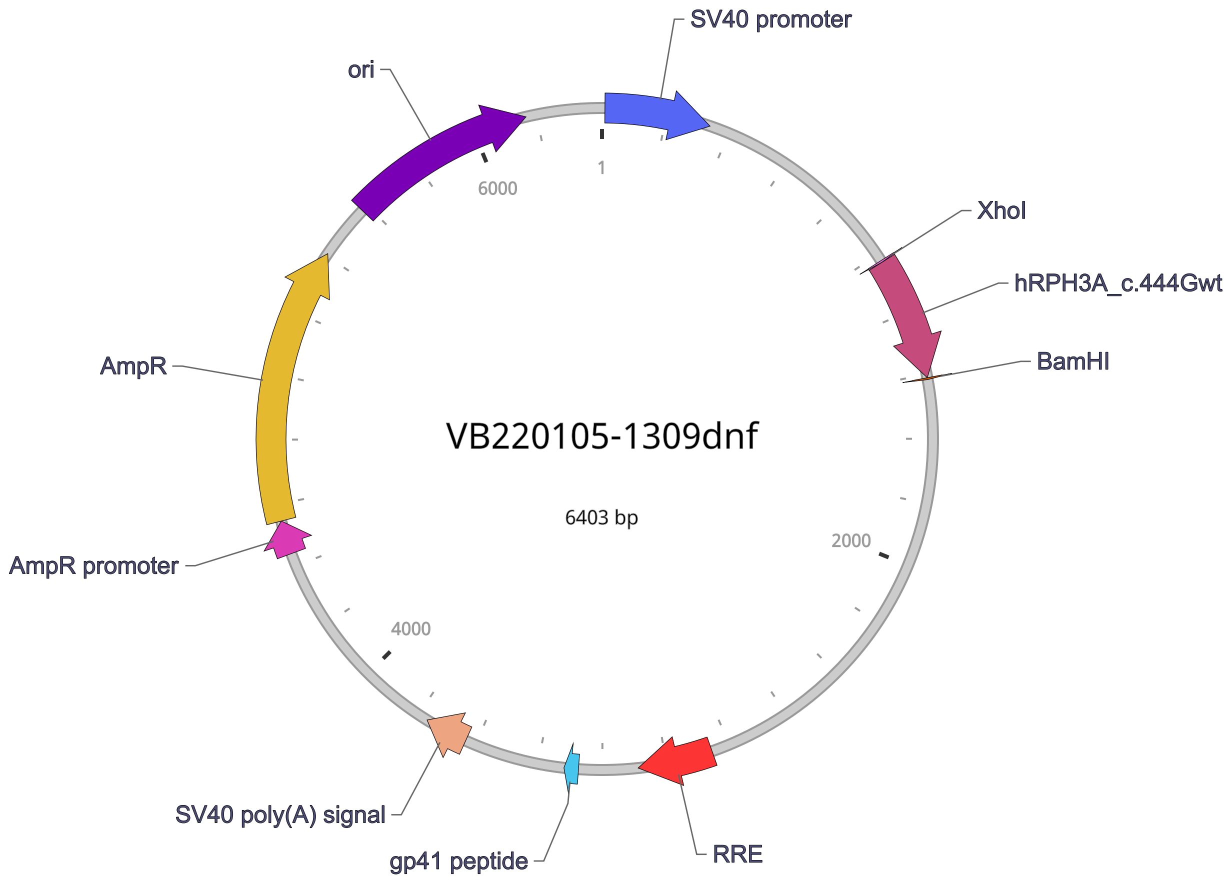
Vector Summary

Vector ID	VB220105-1309dnf
Vector Name	pSPL3-hRPH3A_c.444Gwt
Vector Size	6403 bp
Vector Type	Mammalian Gene Expression Vector
Plasmid Copy Number	High
Antibiotic Resistance	Ampicillin
Cloning Host	VB UltraStable (or alternative strain)

Vector Map



Vector Components

Name	Position	Size (bp)	Type	Description	Application notes
SV40 promoter	🟦 10-339	330	promoter	*None*	note=Unknown feature type:Promoter color: #d84e4e; direction: RIGHT
XhoI	🟪 1022-1027	6	misc_feature	*None*	*None*

Name	Position	Size (bp)	Type	Description	Application notes
hRPH3A_c.444Gwt	🟥 1028-1411	384	misc_feature	*None*	note=hRPH3A_c.444Gwt
BamHI	🟧 1412-1417	6	misc_feature	*None*	*None*
RRE	🟥 2857-3090	234	misc_feature	*None*	full_name=HIV-1 Rev response element
gp41 peptide	🟦 3275-3319	45	ORF	*None*	codon_start=1 product=antigenic peptide corresponding to amino acids 655 to 669 of the HIV envelope protein gp41 (Lutje Hulsik et al., 2013)
SV40 poly(A) signal	🟧 3635-3769	135	polyA_signal	*None*	*None*
AmpR promoter	🟪 4443-4547	105	promoter	*None*	gene=bla note=Unknown feature type:Promoter color: #fd3434; direction: RIGHT
AmpR	🟨 4548-5408	861	ORF	*None*	codon_start=1 full_name=Ampicillin resistance gene gene=bla product=beta-lactamase
ori	🟪 5579-6167	589	rep_origin	*None*	*None*

Note: Components added by user are listed in **bold red** text.

Vector Sequence

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   1 CTGTGGAATG TGTGTCAGTT AGGGTGTGGA AAGTCCCCAG GCTCCCCAGC AGGCAGAAGT ATGCAAAGCA TGCATCTCAA
  81 TTAGTCAGCA ACCAGGTGTG GAAAGTCCCC AGGCTCCCCA GCAGGCAGAA GTATGCAAAG CATGCATCTC AATTAGTCAG
 161 CAACCATAGT CCCGCCCCTA ACTCCGCCCA TCCCGCCCCT AACTCCGCCC AGTTCCGCCC ATTCTCCGCC CCATGGCTGA
 241 CTAATTTTTT TTATTTATGC AGAGGCCGAG GCCGCCTCGG CCTCTGAGCT ATTCCAGAAG TAGTGAGGAG GCTTTTTTGG
 321 AGGCCTAGGC TTTTGCAAAA AGCTTGGACT GTGTTTACTT GCAATCCCCC AAAACAGACA GAATGGTGCA TCTGTCCAGT
 401 GAGGAGAAGT CTGCGGTCAC TGCCCTGTGG GGCAAGGTGA ATGTGGAAGA AGTTGGTGGT GAGGCCCTGG GCAGGCTGCT
 481 GGTTGTCTAC CCATGGACCC AGAGGTTCTT CGAGTCCTTT GGGGACCTGT CCTCTGCAAA TGCTGTTATG AACAATCCTA
 561 AGGTGAAGGC TCATGGCAAG AAGGTGCTGG CTGCCTTCAG TGAGGGTCTG AGTCACCTGG ACAACCTCAA AGGCACCTTT
 641 GCTAAGCTGA GTGAACTGCA CTGTGACAAG CTGCACGTGC TCTAGAGTCG ACCCAGCAGT AAGTAATACA TGTAATGCAA
 721 CCTATACAAA TAGCAATAGT AGCATTAGTA GTAGCAATAA TAATAGCAAT AGTTGTGTGG TCCATAGTAA TCATAGAATA
 801 TAGGAAAATA TTAAGACAAA GAAAAATAGA CAGGTTAATT GATAGACTAA TAGAAAGAGC AGAAGACAGT GGCAATGAGA
 881 GTGAAGGAGA AATATCAGCA CTTGTGGAGA TGGGGGTGGA GATGGGGCAC CATGCTCCTT GGGATGTTGA TGATCTGTAG
 961 TGCTACAGAA AAATTGTGGG TCACAGTCTA TTATGGGGTA GGGATCACCA GAATTCTGGA GCTCGAGATT CTAACTGGCC
1041 TTGCTCATAG AAGGAAGTGG GAGAAATGGA AGCAAGTTCT TCCTCTTTAC ATCCACCAAG AGAAAGTGGG GGGCTACGTT
1121 GCCATGCCTC CCATGAGCAT GGCTCATCTG AGTGTGTTGG CTGTGTTTCA TCCACAGAAC GTCTGCACCA AGTGCGGAGT
1201 GGAGACCAAC AACCGCCTGC ATTCTGTGTG GCTCTGCAAA ATCTGCATTG AGCAGAGGGA GGTGAGTGCC CTGGTCCCAC
1281 CTGGTGCCTA GATCACCCTC CTTTCTTGGC CAGCTTAAGA GGTGCCTTAA GAGGTTTGTA TGAAAGGACC CAGCTCAGCA
1361 GTGAACATTG ACAGAACAAC CTCAGAGTAT TTGGATGAAT TATTTCTCCT CGGATCCCAG ATATCTGGTG ATCCCGTACC
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1441 TGTGTGGAAG GAAGCAACCA CCACTCTATT TTGTGCATCA GATGCTAAAG CATATGATAC AGAGGTACAT AATGTTTGGG
1521 CCACACATGC CTGTGTACCC ACAGACCCCA ACCCACAAGA AGTAGTATTG GTAAATGTGA CAGAAAATTT TAACATGTGG
1601 AAAAATGACA TGGTAGAACA GATGCATGAG GATATAATCA GTTTATGGGA TCAAAGCCTA AAGCCATGTG TAAAATTAAC
1681 CCCACTCTGT GTTAGTTTAA AGTGCACTGA TTTGAAGAAT GATACTAATA CCAATAGTAG TAGCGGGAGA ATGATAATGG
1761 AGAAAGGAGA GATAAAAAAC TGCTCTTTCA ATATCAGCAC AAGCATAAGA GGTAAGGTGC AGAAAGAATA TGCATTTTTT
1841 TATAAACTTG ATATAATACC AATAGATAAT GATACTACCA GCTATACGTT GACAAGTTGT AACACCTCAG TCATTACACA
1921 GGCCTGTCCA AAGGTATCCT TTGAGCCAAT TCCCATACAT TATTGTGCCC CGGCTGGTTT TGCGATTCTA AAATGTAATA
2001 ATAAGACGTT CAATGGAACA GGACCATGTA CAAATGTCAG CACAGTACAA TGTACACATG GAATTAGGCC AGTAGTATCA
2081 ACTCAACTGC TGTTAAATGG CAGTCTAGCA GAAGAAGAGG TAGTAATTAG ATCTGTCAAT TTCACGGACA ATGCTAAAAC
2161 CATAATAGTA CAGCTGAACA CATCTGTAGA AATTAATTGT ACAAGACCCA ACAACAATAC AAGAAAAAAA ATCCGTATCC
2241 AGAGGGGACC AGGGAGAGCA TTTGTTACAA TAGGAAAAAT AGGAAATATG AGACAAGCAC ATTGTAACAT TAGTAGAGCA
2321 AAATGGAATG CCACTTTAAA ACAGATAGCT AGCAAATTAA GAGAACAATT TGGAAATAAT AAAACAATAA TCTTTAAGCA
2401 ATCCTCAGGA GGGGACCCAG AAATTGTAAC GCACAGTTTT AATTGTGGAG GGGAATTTTT CTACTGTAAT TCAACACAAC
2481 TGTTTAATAG TACTTGGTTT AATAGTACTT GGAGTACTGA AGGGTCAAAT AACACTGAAG GAAGTGACAC AATCACACTC
2561 CCATGCAGAA TAAAACAATT TATAAACATG TGGCAGGAAG TAGGAAAAGC AATGTATGCC CCTCCCATCA GCGGACAAAT
2641 TAGATGTTCA TCAAATATTA CAGGGCTGCT ATTAACAAGA GATGGTGGTA ATAACAACAA TGGGTCCGAG ATCTTCAGAC
2721 CTGGAGGAGG AGATATGAGG GACAATTGGA GAAGTGAATT ATATAAATAT AAAGTAGTAA AAATTGAACC ATTAGGAGTA
2801 GCACCCACCA AGGCAAAGAG AAGAGTGGTG CAGAGAGAAA AAAGAGCAGT GGGAATAGGA GCTTTGTTCC TTGGGTTCTT
2881 GGGAGCAGCA GGAAGCACTA TGGGCGCAGC GTCAATGACG CTGACGGTAC AGGCCAGACA ATTATTGTCT GGTATAGTGC
2961 AGCAGCAGAA CAATTTGCTG AGGGCTATTG AGGCGCAACA GCATCTGTTG CAACTCACAG TCTGGGGCAT CAAGCAGCTC
3041 CAGGCAAGAA TCCTGGCTGT GGAAAGATAC CTAAAGGATC AACAGCTCCT GGGGATTTGG GGTTGCTCTG GAAAACTACT
3121 TTGCACCACT GCTGTGCCTT GGAATGCTAG TTGGAGTAAT AAATCTCTGG AACAGATTTG GAATCACACG ACGTGGATGG
3201 AGTGGGACAG AGAAATTAAC AATTACACAA GCTTAATACA CTCCTTAATT GAAGAATCGC AAAACCAGCA AGAAAAGAAT
3281 GAACAAGAAT TATTGGAATT AGATAAATGG GCAAGTTTGT GGAATTGGTT TAACATAACA AATTGGCTGT GGTATATAAA
3361 ATTATTCATA ATGATAGTAG GAGGCTTGGT AGGTTTAAGA ATAGTTTTTG CTGTACTTTC TGTAGTGAAT AGAGTTAGGC
3441 AGGGATATTC ACCATTATCG TTTCAGACCT GGAGATCTCC CGAGGGGACC CGACAGGCCC GAAGGAATAG AAGAAGAAGG
3521 TGGAGAGAGA GACAGAGACA GATCCATTTC GACCAATTCA CTCCTCAGGT GCAGGCTGCC TATCAGAAGG TGGTGGCTGG
3601 TGTGGCCAAT GCCCTGGCTC ACAAATACCA CTGAGATCCA GACATGATAA GATACATTGA TGAGTTTGGA CAAACCACAA
3681 CTAGAATGCA GTGAAAAAAA TGCTTTATTT GTGAAATTTG TGATGCTATT GCTTTATTTG TAACCATTAT AAGCTGCAAT
3761 AAACAAGTTA ACAACAACAA TTGCATTCAT TTTATGTTTC AGGTTCAGGG GGAGGTGTGG GAGGTTTTTT AAAGCAAGTA
3841 AAACCTCTAC AAATGTGGTA TGGCTGATTA TGATCCCCAG GAAGCTCCTC TGTGTCCTCA TAAACCCTAA CCTCCTCTAC
3921 TTGAGAGGAC ATTCCAATCA TAGGCTGCCC ATCCACCCTC TGTGTCCTCC TGTTAATTAG GTCACTTAAC AAAAAGGAAA
4001 TTGGGTAGGG GTTTTTCACA GACCGCTTTC TAAGGGTAAT TTTAAAATAT CTGGGAAGTC CCTTCCACTG CTGTGTTCCA
4081 GAAGTGTTGG TAAACAGCCC ACAAATGTCA ACAGCAGAAA CATACAAGCT GTCAGCTTTG CACAAGGGCC CAACACCCTG
4161 CTCATCAAGA AGCACTGTGG TTGCTGTGTT AGTAATGTGC AAAACAGGAG GCACATTTTC CCCACCTGTG TAGGTTCCAA
4241 AATATCTAGT GTTTTCATTT TTACTTGGAT CAGGAACCCA GCACTCCACT GGATAAGCAT TATCCTTATC CAAAACAGCC
4321 TTGTGGTCAG TGTTCATCTG CTGACTGTCA ACTGTAGCAT TTTTTGGGGT TACAGTTTGA GCAGGATATT TGGTCCTGTA
4401 GTTTGCTAAC ACACCCCAGG TGGCACTTTT CGGGGAAATG TGCGCGGAAC CCCTATTTGT TTATTTTTCT AAATACATTC
4481 AAATATGTAT CCGCTCATGA GACAATAACC CTGATAAATG CTTCAATAAT ATTGAAAAAG GAAGAGTATG AGTATTCAAC
4561 ATTTCCGTGT CGCCCTTATT CCCTTTTTTG CGGCATTTTG CCTTCCTGTT TTTGCTCACC CAGAAACGCT GGTGAAAGTA
4641 AAAGATGCTG AAGATCAGTT GGGTGCACGA GTGGGTTACA TCGAACTGGA TCTCAACAGC GGTAAGATCC TTGAGAGTTT
4721 TCGCCCCGAA GAACGTTTTC CAATGATGAG CACTTTTAAA GTTCTGCTAT GTGGCGCGGT ATTATCCCGT ATTGACGCCG
4801 GGCAAGAGCA ACTCGGTCGC CGCATACACT ATTCTCAGAA TGACTTGGTT GAGTACTCAC CAGTCACAGA AAAGCATCTT
4881 ACGGATGGCA TGACAGTAAG AGAATTATGC AGTGCTGCCA TAACCATGAG TGATAACACT GCGGCCAACT TACTTCTGAC
4961 AACGATCGGA GGACCGAAGG AGCTAACCGC TTTTTTGCAC AACATGGGGG ATCATGTAAC TCGCCTTGAT CGTTGGGAAC
5041 CGGAGCTGAA TGAAGCCATA CCAAACGACG AGCGTGACAC CACGATGCCT GTAGCAATGG CAACAACGTT GCGCAAACTA
5121 TTAACTGGCG AACTACTTAC TCTAGCTTCC CGGCAACAAT TAATAGACTG GATGGAGGCG GATAAAGTTG CAGGACCACT
5201 TCTGCGCTCG GCCCTTCCGG CTGGCTGGTT TATTGCTGAT AAATCTGGAG CCGGTGAGCG TGGGTCTCGC GGTATCATTG
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5281  CAGCACTGGG GCCAGATGGT AAGCCCTCCC GTATCGTAGT TATCTACACG ACGGGGAGTC AGGCAACTAT GGATGAACGA
5361  AATAGACAGA TCGCTGAGAT AGGTGCCTCA CTGATTAAGC ATTGGTAACT GTCAGACCAA GTTTACTCAT ATATACTTTA
5441  GATTGATTTA AAACTTCATT TTTAATTTAA AAGGATCTAG GTGAAGATCC TTTTTGATAA TCTCATGACC AAAATCCTTA
5521  ACGGTGAGTT TTCGTTCCAC TGAGCGTCAG ACCCCGTAGA AAAGATCAAA GGATCTTCTT GAGATCCTTT TTTTCTGCGC
5601  GTAATCTGCT GCTTGCAAAC AAAAAAACCA CCGCTACCAG CGGTGGTTTG TTTGCCGGAT CAAGAGCTAC CAACTCTTTT
5681  TCCGAAGGTA ACTGGCTTCA GCAGAGCGCA GATACCAAAT ACTGTCCTTC TAGTGTAGCC GTAGTTAGGC CACCACTTCA
5761  AGAACTCTGT AGCACCGCCT ACATACCTCG CTCTGCTAAT CCTGTTACCA GTGGCTGCTG CCAGTGGCGA TAAGTCGTGT
5841  CTTACCGGGT TGGACTCAAG ACGATAGTTA CCGGATAAGG CGCAGCGGTC GGGCTGAACG GGGGGTTCGT GCACACAGCC
5921  CAGCTTGGAG CGAACGACCT ACACCGAACT GAGATACCTA CAGCGCGAGC ATTGAGAAAG CGCCACGCTT CCCGAAGGGA
6001  GAAAGGCGGA CAGGTATCCG GTAAGCGGCA GGGTCGGAAC AGGAGAGCGC ACGAGGGAGC TTCCAGGGGG AAACGCCTGG
6081  TATCTTTATA GTCCTGTCGG GTTTCGCCAC CTCTGACTTG AGCGTCGATT TTTGTGATGC TCGTCAGGGG GGCGGAGCCT
6161  ATGGAAAAAC GCCAGCAACG CGGCCTTTTT ACGGTTCCTG GCCTTTTGCT GGCCTTTTGC TCACATGTTC TTTCCTGCGT
6241  TATCCCCTGA TTCTGTGGAT AACCGTATTA CCGCCTTTGA GTGAGCTGAT ACCGCTCGCC GCAGCCGAAC GACCGAGCGC
6321  AGCGAGTCAG TGAGCGAGGA AGCGGAAGAG CGCCCAATAC GCAAACCGCC TCTCCCCGCG CGTTGGCCGA TTCATTAATG
6401  CAG
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Validation by Restriction Enzyme Digestion

Restriction Enzymes	Cutting Sites	DNA Fragments (bp)
XhoI	1023	6403
NdeI	1493	6403
ApaLI	1703, 4664, 5910	2961, 1246, 2196
EcoRV	1423	6403
BamHI	1413	6403
ApaLI+XhoI	1023, 1703, 4664, 5910	680, 2961, 1246, 1516
ApaLI+NdeI	1493, 1703, 4664, 5910	210, 2961, 1246, 1986
ApaLI+BamHI	1413, 1703, 4664, 5910	290, 2961, 1246, 1906
ApaLI+EcoRV	1423, 1703, 4664, 5910	280, 2961, 1246, 1916