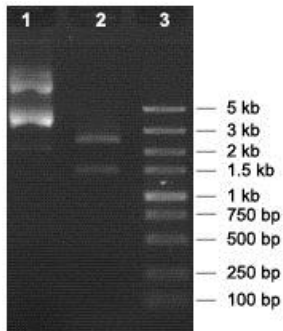


## pUC-HBsAg

Cat# HBV-S400

<b>Gene Name</b>	pUC-HBsAg
<b>Gene description:</b>	Codon optimized cDNA clone of large surface protein of hepatitis B virus
<b>cDNA Insert Size</b>	1200 bp codon optimized cDNA clone of large S protein (aa 1-400) from HBV <i>adw</i> (Genotype B) (Gene accession# ACH58029)
<b>Vector</b>	pUC57
<b>Cloning Site</b>	EcoRV
<b>Concentration</b>	10 µg (0.2 µg/µl), dissolved in 10 mM Tris/HCl (pH 8.5)
<b>Storage</b>	4 °C

### Quality Control



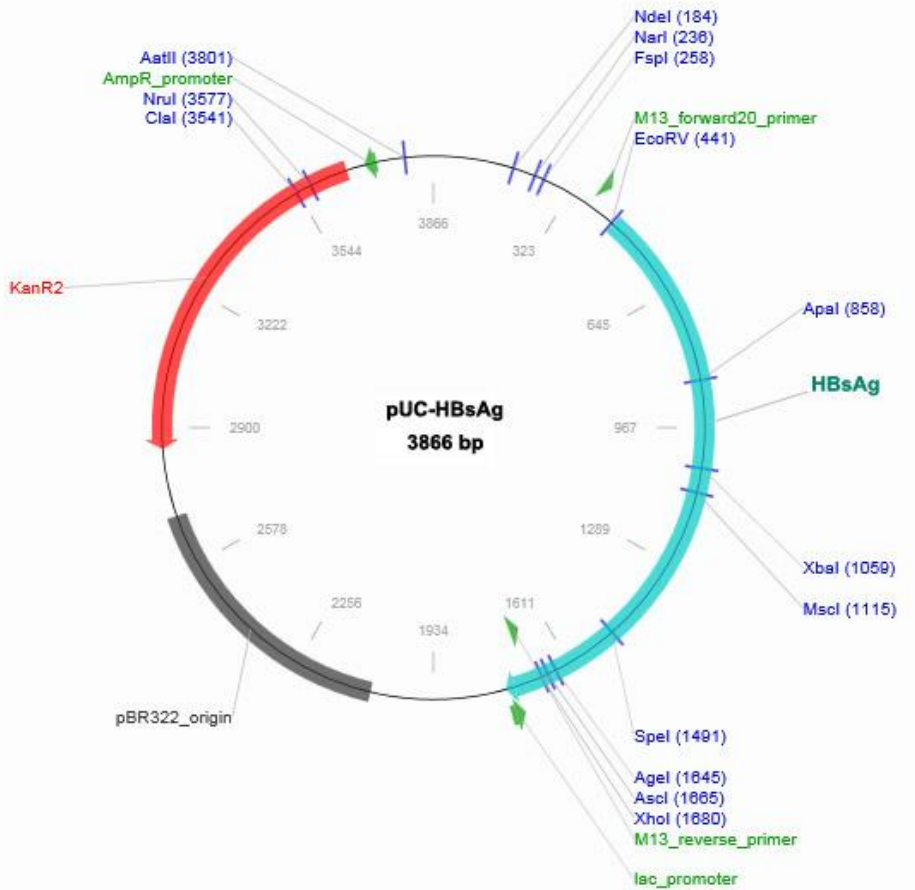
**Restriction Enzyme Digestion:**

Lane 1, undigested

Lane 2, digested with NdeI and XhoI

Lane 3, DNA ladder

**Construct map:**



**Detailed amino acid sequence of the HBsAg cDNA clone:**

```

1      MGGWSSKPRK  GMGTNLSVPN  PLGFFPDHQL  DPAFKANSEN  PDWDLNPHKD  NWPDANKVGV
61     GAFGPGFTPP  HGGLLGWSPQ  AQGILTTVPA  APPPASTNRQ  SGRQPTPLSP  PLRDTHPQAM
121    QWNSTTFHQT  LQDPRVRALY  LPAGGSSSGT  VNPAQNTVSA  ISSILSKTGD  PVPNMENITS
181    GLLGPLLVLQ  AGFFSLTKIL  TIPQSLDSWW  TSLNFLGETP  VCLGQNSQSQ  ISSHSPTCCP
241    PICPGYRWMC  LRRFIIFLCI  LLLCLIFLLV  LLDYQGMLPV  CPLIPGSSTT  STGPCKTCTT
301    PAQGTSMFPS  CCCTKPTDGN  CTCIPIPSW  AFAKFLWEWA  SVRFSWLSSL  VPFVQWFVGL
361    SPTVWLSVIW  MMWFWGRSLY  NILSPFMPLL  PIFFYLWVYI
    
```

**Detailed sequence of the whole construct (pUC-HBsAg):**

```

1      TCGCGCGTTT  CGGTGATGAC  GGTGAAAACC  TCTGACACAT  GCAGCTCCCG  GAGACGGTCA  CAGCTTGCTC
71     GTAAGCGGAT  GCCGGGAGCA  GACAAGCCCG  TCAGGGCGCG  TCAGCGGGTG  TTGGCGGGTG  TCGGGGCTGG
141    CTTAACTATG  CGGCATCAGA  GCAGATTGTA  CTGAGAGTGC  ACCATATGCG  GTGTGAAATA  CCGCACAGAT
211    GCGTAAGGAG  AAAATACCGC  ATCAGGCGCC  ATTCGCCATT  CAGGCTGCGC  AACTGTTGGG  AAGGGCGATC
281    GGTGCGGGCC  TCTTCGCTAT  TACGCCAGCT  GGCGAAAGGG  GGATGTGCTG  CAAGGCGATT  AAGTTGGGTA
351    ACGCCAGGGT  TTTCCAGTC  ACGACGTTGT  AAAACGACGG  CCAGTGAATT  GACGCGTATT  GGGATGGAAC
    
```

421 GAGCATGTGG TTTAATTTGA TATCATGGGA GGTGTTGCTT CCAAACCTCG AAAAGGCATG GGGACAAATC  
491 TTTCTGTCCC CAATCCCCTG GGATTCTTCC CCGATCATCA GTTGGACCCT GCATTCAAAG CCAACTCAGA  
561 AAATCCAGAT TGGGACCTCA ACCCGCACAA GGACAACTGG CCGGACGCCA ACAAGGTGGG AGTGGGAGCA  
631 TTCGGGCCAG GGTTCACCCC TCCCCACGGG GGATTGTTGG GGTGGAGCCC TCAAGCTCAG GGCATACTCA  
701 CAACTGTGCC AGCAGCTCCT CCTCCTGCCT CCACCAATCG GCAGTCAGGA AGGCAGCCTA CTCCCTTATC  
771 TCCACCTCTA AGGGACACTC ATCCTCAGGC CATGCAGTGG AACTCCACCA CTTTCCACCA AACTCTTCAA  
841 GATCCCAGAG TCAGGGCCCT GTACCTTCTT GCTGGTGGCT CCAGTTCAGG AACTGTGAAC CCTGCTCAGA  
911 ATACTGTCTC TGCCATATCG TCAATCTTAT CGAAGACTGG GGACCCTGTA CCGAACATGG AGAACATCAC  
981 ATCAGGACTC CTAGGACCCC TGCTCGTGTT ACAGGCGGGG TTTTCTCGT TGACAAAAAT CCTCACAATA  
1051 CCACAGAGTC TAGACTCGTG GTGGACTTCT CTCAATTTTC TAGGGGAAAC ACCCGTGTGT CTTGGCCAAA  
1121 ATTCGCAGTC CCAAATCTCC AGTCACTCAC CAACCTGTTG TCCTCCAATT TGTCTTGGT ATCGCTGGAT  
1191 GTGTCTGCGG CGTTTTATCA TCTTCCTCTG CATCCTGCTG CTATGCCTCA TCTTCTTGT GTTCTTCTG  
1261 GACTATCAAG GTATGTTGCC CGTTTGTCTT CTAATTCCAG GATCATCAAC AACCAGCACC GGACCATGCA  
1331 AAACCTGCAC GACTCCTGCT CAAGGAACCT CTATGTTTCC CTCATGTTGC TGTACAAAAC CTACGGACGG  
1401 AAACCTGCACC TGTATTCCCA TCCCATCATC TTGGGCTTTC GCAAAATTCC TATGGGAGTG GGCCTCAGTC  
1471 CGTTTCTCTT GGCTCAGTTC ACTAGTGCCA TTTGTTTCACT GGTTTCGTAGG GCTTTCCTCC ACTGTCTGGC  
1541 TTTCAAGTAT ATGGATGATG TGGTTTTGGG GGCGAAGTCT GTACAACATC TTGAGTCCCT TTATGCCGCT  
1611 GTTACCCATT TTCTTTTATC TTTGGGTATA CATTACCGGT GTTCCATCCC AATGGCGCGC CGAGCTTGGC  
1681 TCGAGCATGG TCATAGCTGT TTCCTGTGTG AAATTGTTAT CCGCTCACAA TTCCACACAA CACACGAGCC  
1751 GGAAGCATAA AGTGTAAGC CTGGGGTGCC TAATGAGTGA GCTAACTCAC ATTAATTGCG TTGCGCTCAC  
1821 TGCCCCGTTT CCAGTCGGGA AACCTGTCGT GCCAGCTGCA TTAATGAATC GGCCAACGCG CGGGGAGAGG  
1891 CGGTTTGCCT ATTGGGCGCT CTTCCGCTTC CTCGCTCACT GACTCGCTGC GCTCGGTCTG TCGGCTGCGG  
1961 CGAGCGGTAT CAGCTCACTC AAAGGCGGTA ATACGGTAT CCACAGAATC AGGGGATAAC GCAGGAAAGA  
2031 ACATGTGAGC AAAAGGCCAG CAAAAGGCCA GGAACCGTAA AAAGGCCGCG TTGCTGGCGT TTTTCCATAG  
2101 GCTCCGCCCC CCTGACGAGC ATCACAAAAA TCGACGCTCA AGTCAGAGGT GGCGAAACCC GACAGGACTA  
2171 TAAAGATAAC AGGCGTTTCC CCCTGGAAGC TCCCTCGTGC GCTCTCCTGT TCCGACCCTG CCGCTTACCG  
2241 GATACCTGTC CGCCTTTCTC CTTTCGGGAA GCGTGGCGCT TTCTCATAGC TCACGCTGTA GGTATCTCAG  
2311 TTCGGTGTAG GTCGTTGCTT CCAAGCTGGG CTGTGTGCAC GAACCCCCCG TTCAGCCCCG CCGCTGCGCC  
2381 TTATCCGGTA ACTATCGTCT TGAGTCCAAC CCGGTAAAGC ACGACTTATC GCCACTTATC GACGCCACTG  
2451 GTAACAGGAT TAGCAGAGCG AGGTATGTAG GCGGTGCTAC AGAGTTCTTG AAGTGGTGGC CTAAGTACGG  
2521 CTACACTAGA AGAACAGTAT TTGGTATCTG CGCTCTGCTG AAGCCAGTTA CCTTCGAAAA AAGAGTTGGT  
2591 AGCTCTTGAT CCGGCAACA AACCACCGCT GGTAGCGGTG GTTTTTTTGT TTGCAAGCAG CAGATTACGC  
2661 GCAGAAAAAA AGGATCTCAA GAAGATCCTT TGATCTTTTC TACGGGGTCT GACGCTCAGT GGAACGAAAA  
2731 CTCACGTTAA GGGATTTTGG TCATGAGATT ATCAAAAAGG ATCTTACCT AGATCCTTTT AAATTAATAA  
2801 TGAAGTTTTA AATCAATCTA AAGTATATAT GAGTAACTT GGTCTGACAG TTAGAAAAAC TCATCGAGCA  
2871 TCAAATGAAA CTGCAATTTA TTCATATCAG GATTATCAAT ACCATATTTT TGAAAAAGCC GTTTCTGTAA  
2941 TGAAGGAGAA AACTCACCGA GGCAGTTCCA TAGGATGGCA AGATCCTGGT ATCGGTCTGC GATTCCGACT  
3011 CGTCCAACAT CAATACAACC TATTAATTTT CCCTCGTCAA AAATAAGGTT ATCAAGTGAG AAATCACCAT  
3081 GAGTGACGAC TGAATCCGGT GAGAATGGCA AAAGTTTATG CATTCTTTTC CAGACTTGTT CAACAGGCCA  
3151 GCCATTACGC TCGTCATCAA AATCACTCGC ATCAACCAAA CCGTTATTCA TTCGTGATTG CGCCTGAGCG  
3221 AGACGAAATA CGCGATCGCT GTTAAAAGGA CAATTACAAA CAGGAATCGA ATGCAACCGG CGCAGGAACA  
3291 CTGCCAGCGC ATCAACAATA TTTTACCTG AATCAGGATA TTCTTCTAAT ACCTGGAATG CTGTTTTCCC  
3361 AGGGATCGCA GTGGTGAGTA ACCATGCATC ATCAGGAGTA CGGATAAAAT GCTTGATGGT CGGAAGAGGC  
3431 ATAAATTCCG TCAGCCAGTT TAGTCTGACC ATCTCATCTG TAACATCATT GGCAACGCTA CTTTGGCCAT  
3501 GTTTCAGAAA CAACTCTGGC GCATCGGGCT TCCCATACAA TCGATAGATT GTCGCACCTG ATTGCCCGAC  
3571 ATTATCGCGA GCCCAATTTA ACCCATATAA ATCAGCATCC ATGTTGGAAT TTAATCGCGG CCTAGAGCAA  
3641 GACGTTTTCC GTTGAATATG GCTCATACTC TTCCTTTTTT AATATTATTG AAGCATTAT CAGGGTTATT  
3711 GTCTCATGAG CCGATAcata TTTGAATGTA TTTAGAAAAA TAAACAAATA GGGGTTCCGC GCACATTTCC  
3781 CCGAAAAGTG CCACCTGACG TCTAAGAAAC CATTATTATC ATGACATTAA CCTATAAAAA TAGGCGTATC  
3851 ACGAGGCCCT TTCGTC