

pBMH-H1 (A/California/07/2009)(H1N1)

Cat# HA-C359

Gene Name	pBMH-H1 (A/California/07/2009)(H1N1)
Gene description:	Codon optimized cDNA clone of hemagglutinin (aa 1-566) (A/California/07/2009)
cDNA Insert Size	1704 bp codon optimized H1N1 hemagglutinin (A/California/07/2009) cDNA with a Kozak consensus sequence(ACCATGA), corresponding to amino acid 1-566 (Gene accession# ACQ55359).
Vector	pBMH
Cloning Site	SmaI
Concentration	10 µg (0.2 µg/µl), dissolved in 10 mM Tris/HCl (pH 8.5)
Storage	4 °C

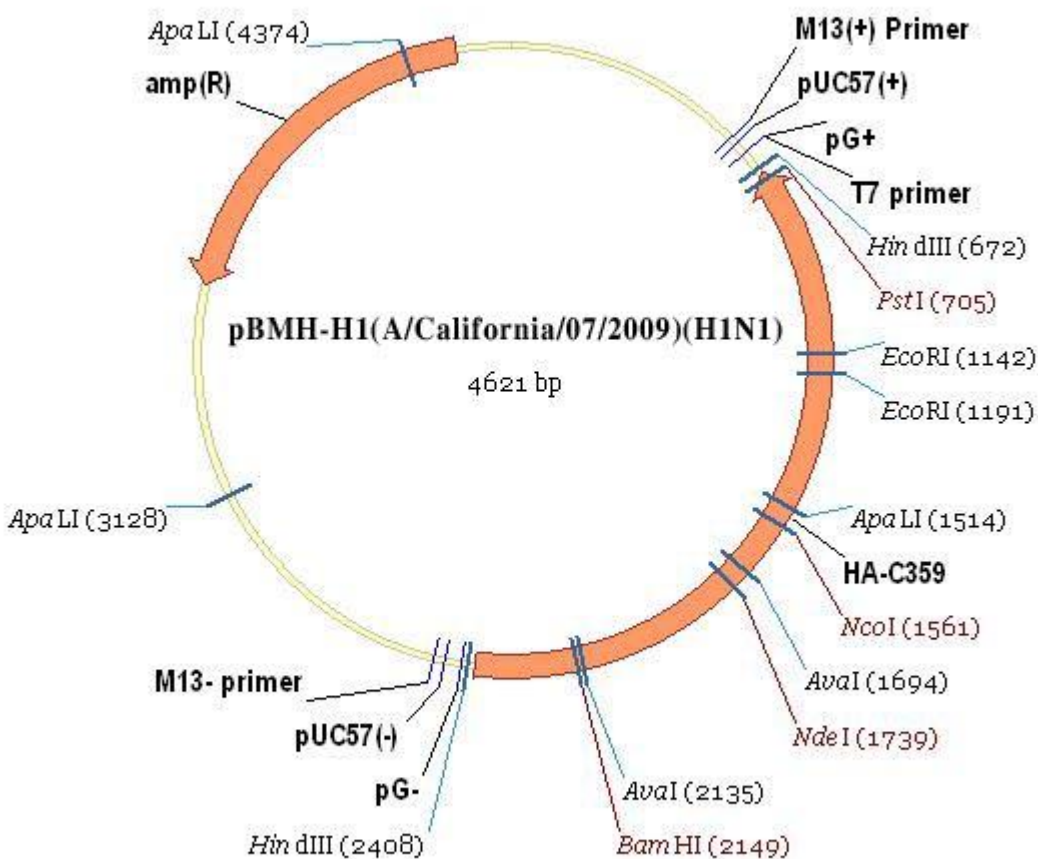
Quality control:



RES:HindIII



Construct map (revser complementary):



Detailed sequence of the whole construct (pBMH-H1 (A/California/07/2009)(H1N1):

1	CTAAATTGTA	AGCGTTAATA	TTTTGTTAAA	ATTCGCGTTA	AATTTTTTGT	AAATCAGCTC
61	ATTTTTTAAAC	CAATAGGCCG	AAATCGGCAA	AATCCCTTAT	AAATCAAAAG	AATAGACCGA
121	GATAGGGTTG	AGTGTGTGTC	CAGTTTGGA	CAAGAGTCCA	CTATTAAAGA	ACGTGGACTC
181	CAACGTCAAA	GGGCGAAAAA	CCGTCTATCA	GGGCGATGGC	CCACTACGTG	AACCATCACC
241	CTAATCAAGT	TTTTTGGGGT	CGAGGTGCCG	TAAAGCACTA	AATCGGAACC	CTAAAGGGAG
301	CCCCGATTT	AGAGCTTGAC	GGGGAAAGCC	GGCGAACGTG	GCGAGAAAGG	AAGGGAAGAA
361	AGCGAAAGGA	GCGGGCGCTA	GGGCGCTGGC	AAGTGTAGCG	GTCACGCTGC	GCGTAACCAC
421	CACACCCGCC	GCGCTTAATG	CGCCGCTACA	GGGCGCGTCC	CATTCGCCAT	TCAGGCTGCG
481	CAACTGTTGG	GAAGGGCGAT	CGGTGCGGGC	CTCTTCGCTA	TTACGCCAGC	TGGCGAAAGG
541	GGGATGTGCT	GCAAGGCGAT	TAAGTTGGGT	AACGCCAGGG	TTTTCCAGT	CACGACGTTG
601	TAAAACGACG	GCCAGTGAGC	GCGCGTAATA	CGACTCACTA	TAGGGCGAAT	TGGGTACGGC
661	CGTCAAGGCC	AAGCTTCCCA	TTGGGATGCA	GATCCTACAC	TGCAGGCTTC	CGTTGGAGCA
721	CATCCAAAAG	GAAATTGCCC	CCAGGCTCAC	GACCAGGACC	AGGGAGGATG	CGACGGTGCT
781	GTAGATGGCC	AGAATCTGGT	AGATTCTTGT	GCTTTCCAGT	TTGACGCCGT	CGATTTCTCT
841	TCTGTTCAGT	TTGGCCTCTT	CGGAATACTT	TGGGTAATCG	TATGTTCCGT	TCTTCACGGA
901	CTCCATACAT	GTGTTGTCGC	ACTTATGGTA	GAACTCGAAA	CAGCCGTTTC	CAATCTCTTT
961	GGCGTTATTC	TTCAGTTGGG	ATCTCACCTT	TTCGTACAGG	TTTTTCACAT	TGGAGTCATG
1021	ATAATCCAGG	GTTCTCTCGT	TTTCCAGCAG	CACCAGCAGT	TCGGCGTTGT	ATGTCCAGAT
1081	ATCCAGAAAG	CCATCGTCCA	CTTTCTTGTT	CAGATTCTCA	ATTCTCTTTT	CCAGATGGTT
1141	GAATTCTTTC	CCCACGGCTG	TGAACTGAGT	ATTCATCTTT	TCGATGACGG	AATTCACCTT
1201	ATTAGTGATC	TCGTCGATAG	CATTCTGAGT	GCTCTTCAGG	TCTGCGGCGT	ATCCGCTGCC
1261	TTGTTGCTTC	TGATGGTGGT	AGCCATACCA	TCCGTCCACC	ATGCCAGTCC	ACCCGCCCTC
1321	GATAAATCCG	GCAATGGCGC	CGAACAGGCC	CCTGCTCTGG	ATGGAGGGGA	TATTCCCTCAG
1381	CCCGGTAGCC	AGTCTCAGCT	TAGTGGACTT	GACATACTTA	GGACATTTGC	CGATGGTAAT
1441	AGGGTGGATG	TTCTGGAATG	GCAGGGAAGT	ATTGATTGCG	CCCTTTGGGG	TCTGGCAGGT
1501	GGTGTGCAA	TCGTGCACTG	GAGTGTGCGT	GATGATGATG	CCGCTGCCGG	CATTCTTTTC
1561	CATGGCAAAG	GCGTACCTTG	GCACCACCAG	GTTGCCGGTG	GCCTCGAATG	TGATCTTGTC
1621	GCCTGGCTCC	ACCAGTGTCC	AATAGTAATT	CATCCTGCCC	TCTTGGTCCC	TCACCTTAGG
1681	CCTGATAGCA	ATCTCGGGCT	TGAATTTCTT	GGAGTATCTG	GAGGACCCCA	CGAAGACATA
1741	TGCGTCAGCG	TTCTGGTACA	GGCTTTGTTG	GTCGGCGCTT	GTGGAAGGGT	GGTGGATGCC
1801	CCACAGCACC	AGCACCTCTT	TGCCTTTGTC	ATTGATGTAG	CTCTTGGA	GCTTGGGGTA
1861	GCTGTTGCC	TTTTTGACCA	GCCAGATCAG	GTTCTTGTA	AAGGACTTGG	CGCCTGCATG
1921	TGGGCAGGCG	GCGGTCACGC	CCTTATTGCT	GTCGTGGTTG	GGCCAGGAGC	TTGTCTTTGG
1981	GAAGATCTCA	AATCTTTCAA	AGCTGGACAC	GGAGCTCAGT	TGTTCCCTCA	GCTCCTCGTA
2041	GTCGATGAAG	TCGCCGGGAT	AGCAGGTGCC	GTTGTGCGAG	CTGGGGGTCT	CCACGATATA
2101	GCTCCAGCTG	CTGGCGGTGC	TCAGGCTCTC	GCACTCGGGG	TTGCCCAGGA	TCCAGCCGGC
2161	GATGTTGCAC	TTGCCCAGGT	GCAGGGGAGC	CACGCCCTC	AGTTTACACA	GTTTGCCGTT
2221	ATGCTTATCT	TCCAGCAGGT	TCACGCTGTG	GGTGACGGTC	ACATTTTCT	CCAGGACGGT
2281	ATCCACGGTG	TCGGTGGAAT	TGTTGGCGTG	GTAGCCGATG	CACAGTGTGT	CTGCGTTGGC
2341	AGTAGCAAAT	GTGTACAGCA	GGACCACCAG	AATAGCTTTC	ATGGTGGCAT	TGGGGGATAT
2401	CACGTGAAGC	TTGCAAGCTC	CAGCTTTTGT	TCCCTTTAGT	GAGGGTTAAT	TGCGCGCTTG
2461	GCGTAATCAT	GGTCATAGCT	GTTTCCTGTG	TGAAATTGTT	ATCCGCTCAC	AATTCCACAC
2521	AACATACGAG	CCGGAAGCAT	AAAGTGTA	GCCTGGGGTG	CCTAATGAGT	GAGCTAACTC
2581	ACATTAATTG	CGTTGCGCTC	ACTGCCCGCT	TTCCAGTCGG	GAAACCTGTC	GTGCCAGCTG
2641	CATTAATGAA	TCGGCCAACG	CGCGGGGAGA	GGCGGTTTGC	GTATTGGGCG	CTCTTCCGCT
2701	TCCTCGCTCA	CTGACTCGCT	GCGCTCGGTC	GTTGCGGCTG	GGCGAGCGGT	ATCAGCTCAC
2761	TCAAAGGCGG	TAATACGGTT	ATCCACAGAA	TCAGGGGATA	ACGCAGGAAA	GAACATGTGA
2821	GCAAAAGGCC	AGCAAAAGGC	CAGGAACCGT	AAAAAGGCCG	CGTTGCTGGC	GTTTTTCCAT
2881	AGGCTCCGCC	CCCCTGACGA	GCATCACAAA	AATCGACGCT	CAAGTCAGAG	GTGGCGAAAC
2941	CCGACAGGAC	TATAAAGATA	CCAGGCGTTT	CCCCCTGGAA	GCTCCCTCGT	GCGCTCTCCT



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3001 GTTCCGACCC TGCCGCTTAC CGGATACCTG TCCGCCTTTC TCCCTTCGGG AAGCGTGCGC
3061 CTTTCTCATA GCTCACGCTG TAGGTATCTC AGTTCGGTGT AGGTCGTTTC CTCCAAGCTG
3121 GGCTGTGTGC ACGAACCCCC CGTTCAGCCC GACCGCTGCG CTTTATCCGG TAACTATCGT
3181 CTTGAGTCCA ACCCGGTAAG ACACGACTTA TCGCCACTGG CAGCAGCCAC TGGTAACAGG
3241 ATTAGCAGAG CGAGGTATGT AGGCGGTGCT ACAGAGTTCT TGAAGTGGTG GCCTAACTAC
3301 GGCTACACTA GAAGGACAGT ATTTGGTATC TGCCTCTGCT TGAAGCCAGT TACCTTCGGA
3361 AAAAGAGTTG GTAGCTCTTG ATCCGGCAAA CAAACCACCG CTGGTAGCGG TGGTTTTTTT
3421 GTTTGCAAGC AGCAGATTAC GCGCAGAAAA AAAGGATCTC AAGAAGATCC TTTGATCTTT
3481 TCTACGGGGT CTGACGCTCA GTGGAACGAA AACTCACGTT AAGGGATTTT GGTTCATGAGA
3541 TTATCAAAAA GGATCTTCAC CTAGATCCTT TTAAATTAAA AATGAAGTTT TAAATCAATC
3601 TAAAGTATAT ATGAGTAAAC TTGGTCTGAC AGTTACCAAT GCTTAATCAG TGAGGCACCT
3661 ATCTCAGCGA TCTGTCTATT TCGTTCATCC ATAGTTGCCT GACTCCCCGT CGTGTAGATA
3721 ACTACGATAC GGGAGGGCTT ACCATCTGGC CCCAGTGCTG CAATGATACC GCGAGATCCA
3781 CGCTCACCGG CTCCAGATTT ATCAGCAATA AACCAGCCAG CCGGAAGGGC CGAGCGCAGA
3841 AGTGGTCTCT CAACCTTTATC CGCCTCCATC CAGTCTATTA ATTGTTGCCG GGAAGCTAGA
3901 GTAAGTAGTT CGCCAGTTAA TAGTTTGCGC AACGTTGTTG CCATTGCTAC AGGCATCGTG
3961 GTGTCACGCT CGTCGTTTGG TATGGCTTCA TTCAGCTCCG GTTCCCAACG ATCAAGGCGA
4021 GTTACATGAT CCCCCATGTT GTGCAAAAAA GCGGTTAGCT CCTTCGGTCC TCCGATCGTT
4081 GTCAGAAGTA AGTTGGCCGC AGTGTATCA CTCATGGTTA TGGCAGCACT GCATAATTCT
4141 CTTACTGTCA TGCCATCCGT AAGATGCTTT TCTGTGACTG GTGAGTACTC AACCAAGTCA
4201 TTCTGAGAAT AGTGTATGCG GCGACCGAGT TGCTCTTGCC CGGCGTCAAT ACGGGATAAT
4261 ACCGCGCCAC ATAGCAGAAC TTTAAAAGTG CTCATCATTG GAAAACGTTT TTCGGGGCGA
4321 AAACCTCTCA GGATCTTACC GCTGTTGAGA TCCAGTTCGA TGTAACCCAC TCGTGCACCC
4381 AACTGATCTT CAGCATCTTT TACTTTTACC AGCGTTTCTG GGTGAGCAAA AACAGGAAGG
4441 CAAAATGCCG CAAAAAAGGG AATAAGGGCG ACACGGAAAT GTTGAATACT CATACTCTTC
4501 CTTTTTCAAT ATTATTGAAG CATTTATCAG GGTTATTGTC TCATGAGCGG ATACATATTT
4561 GAATGTATTT AGAAAAATAA ACAAATAGGG GTTCCGCGCA CATTTCCCCG AAAAGTGCCA
4621 C

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Detailed amino acid sequence of the cDNA clone:

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1  MKAILVLLY TFATANADTL CIGYHANNST DTVDTVLEKN VTVTHSVNLL EDKHNGKLCK
61  LRGVAPLHLG KCNIAGWILG NPECESLSTA SSWSYIVETP SSDNGTCYPG DFIDYEELRE
121 QLSSVSSFER FEIFPKTSSW PNHDSNKGVT AACPHAGAKS FYKNLIWLVK KGNSYPKLSK
181 SYINDKGKEV LVLWGIHHPs TSADQQSLYQ NADAYVFGVS SRYSKKFKPE IAIKPKVRDQ
241 EGRMNYWTL VEPGDKITFE ATGNLVVPRY AFAMERNAGS GIIISDTPVH DCNTTCQTPK
301 GAINSLPFO NIHPITIGKC PKYVKSTKLR LATGLRNIPS IQSRGLFGAI AGFIEGGWTG
361 MVDGWYGYHH QNEQSGSYAA DLKSTQNAID EITNKVNSVI EKMNTQFTAV GKEFNHLEKR
421 IENLNKKVDD GFLDIWTYNA ELLVLENER TLDYHDSNVK NLYEKVRSQI KNNAKEIGNG
481 CFEFYHKCDN TCMESVKNGT YDYPKYSEEA KLNREEIDGV KLESTRIYQI LAIYSTVASS
541 LVLVSLGAI SFWMCSNGSL QCRICI

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