

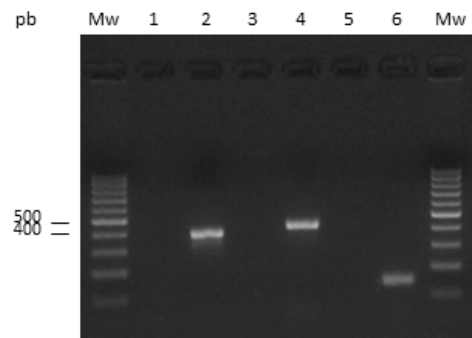


Positive Control for CMV PCR. Gene UL123 (MIE)



Citomegalovirus (CMV) is a member of the herpesvirus family, also known as human herpesvirus 5 (HHV-5). The virus is very common, but if a person’s immune system is seriously weakened in any way, the virus can cause severe complications. The virus is more widespread in developing countries and in communities with lower socioeconomic status and represents the most significant viral cause of birth defects in industrialized countries. Once infected with CMV, the body retains the virus for life. However, CMV usually remains dormant if the person is healthy. The most sensible persons to this infections are pregnant women, organ transplant recipients, and persons with HIV infection. Some people with this condition develop a mononucleosis-like syndrome.

► Aspect of the amplified DNA in a 2% agarose electrophoresis gel, when the described primers are used in the PCR reaction:



The sequences of the primers used to develop the PCRs are showed in the UL123 complete sequence (MIE, major immediate-early). The amplified fragments have size of 390 (1), 434 (2) and 147 (3) bp respectively.

wells	samples
Mw	Molecular weight markers
1	Negative control with primers (1)
2	PCR on 15,000 copies of UL123 DNA, primers (1)
3	Negative control with primers (2)
4	PCR on 15,000 copies of UL123 DNA, primers (2)
5	Negative control with primers (3)
6	PCR on 15,000 copies of UL123 DNA, primers (3)
Mw	Molecular weight markers

- 1- Bistch *et al.*, J. Of Inf. Dis (1993), 167: 740
- 2- Sambiase, *et al.*, Mod Pathol. (2000), 13: 173
- 3- Toyoda *et al.*, Transplantation (1997) 63: 957

► Sequence of the gene UL123 included in the DNA positive control DPC0002:

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1  ATGGAGTCCT CTGCCAAGAG AAAGATGGAC CCTGATAATC CTGACGAGGG
51  CCCTTCCTCC AAGGTGCCAC GGTACGTGTC GGGGTTTGTG CCCCCCTTT
101 TTTTTTTTAA TAAAATTGTA TTAATGTTAT ATACATATCT CCTGTATGTG
151 ACCCATGTGC TTATGACTCT ATTTCTCATG TGTTTAGGCC CGAGACACCC
201 GTGACCAAGG CCACGACGTT CCTGCAGACT ATGTTGAGGA AGGAGGTAA
251 CAGTCAGCTG AGTCTGGGAG ACCCGCTGCT TCCAGAGTTG GCCGAAGAAT
301 CCCTCAAAAC TTTTGAACAA GTGACCGAGG ATTGCAACGA GAACCCCGAG
351 AAAGATGTCC TGGCAGAACT CGGTAAGTCT GTTGACATGT ATGTGATGTA
401 TACTAACCTG CATGGGACGT GGATTACTT GTGTATGTCA GATAGAGTAA
451 AGATTAACCTC TTGCATGTGA GCGGGGCATC GAGATAGCGA TAAATGAGTC
501 AGGAGGACGG ATACTTATAT GTGTTGTTAT CCTCCTCTAC AGTCAAACAG
551 ATTAAGGTTC GAGTGGACAT GGTGCGGCAT AGAATCAAGG AGCACATGCT
601 GAAAAAATAT ACCCAGACGG AAGAGAAATT CACTGGCGCC TTTAATATGA
651 TGGGAGGATG TTTGCAGAAT GCCTTAGATA TCTTAGATAA GGTTCATGAG
701 CCTTTCGAGG AGATGAAGTG TATTGGGCTA ACTATGCAGA GCATGTATGA
751 GAACTACATT GTACCTGAGG ATAAGCGGGA GATGTGGATG GCTTGTATTA
801 AGGAGCTGCA TGATGTGACC AAGGGCGCCG CTAACAAGTT GGGGGGTGCA
851 CTGCAGGCTA AGGCCCGTGC TAAAAAGGAT GAACTTAGGA GAAAGATGAT
901 GTATATGTGC TACAGGAATA TAGAGTTCT TACCAAGAAC TCAGCCTTCC
951 CTAAGACCAC CAATGGCTGC AGTCAGGCCA TGGCGGCACT GCAGAACTTG
1001 CCTCAGTGCT CCCCTGATGA GATTATGGCT TATGCCCAGA AAATATTTAA
1051 GATTTTGGAT GAGGAGAGAG ACAAGGTGCT CACGCACATT GATCACATAT
  
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1101 TTATGGATAT CCTCACTACA TGTGTGGA AA CAATGTGTAA TGAGTACAAG
 1151 GTCAC TAGTG ACGCTTGTAT GATGACCATG TACGGGGGCA TCTCTCTCTT
 1201 AAGTGAGTTC TGTCGGGTGC TGTGCTGCTA TGTCTTAGAG GAGACTAGTG
 1251 TGATGCTGGC CAAGCGGCCT CTGATAACCA AGCCT TGAGGT TATCAGTGTA
 1301 ATGAAGCGCC GCATTGAGGA GATCTGCATG AAGGTCTTTG CCCAGTACAT
 1351 TCTGGGGGCC GATCCTCTGA GAGTCTGCTC TCCTAGTGTG GATGACCTAC
 1401 GGGCCATCGC CGAGGAGTCA GATGAGGAAG AGGCTATTGT AGCCTACACT
 1451 TTGGCCACCG CTGGTGTCAG CTCCTCTGAT TCTCTGGTGT CACCCCCAGA
 1501 GTCCCCTGTA CCCGCGACTA TCCCTCTGTC CTCAGTAATT GTGGCTGAGA
 1551 ACAGTGATCA GGAAGAAAGT GAGCAGAGTG ATGAGGAACA GGAGGAGGGT
 1601 GCTCAGGAGG AGCGGGAGGA CACTGTGTCT GTCAAGTCTG AGCCAGTGTC
 1651 TGAGATAGAG GAAGTTGCC T CAGAGAAAGA GGAGGATGGT GCTG AGGAAC
 1701 CCACCACCTC TGGAGGCAAG AGCACCCACC CTATGGTGAC TAGAAGCAAG
 1751 GCTGACCAGT AA