CLAIMS:

1. An immunogenic composition comprising:
   - an HCMV gB antigen;
   - an HCMV gH/gL/UL128/UL130/UL131 pentameric complex antigen; and
   - a Th1-inducing adjuvant,

~~3. An immunogenic composition according to claim 1 wherein said Th1-inducing adjuvant induces in mice a lower IgG1:IgG2a,c ratio, and/or a higher INF-γ level, and/or a lower IL-5 level than MF59 in a composition comprising the same HCMV gB antigen and the same HCMV gH/gL/UL128/UL130/UL131 pentameric complex antigen.~~

~~5. An immunogenic composition according to claims 1 or 2,~~ wherein said Th1-inducing adjuvant comprises:
   - a TLR-4 agonist; or
   - a polyacrylic acid polymer salt with a weight average molecular weight Mw in the range of 350 to 650 kDa.

~~6.~~2. An immunogenic composition according to ~~any one of claims~~claim 1 ~~to 3~~, wherein said Th1-inducing adjuvant comprises:
   - a TLR-4 agonist selected from the group consisting of a lipopolysaccharide, a monophosphoryl lipid A (MPL), a 3-de-*O*-acylated monophosphoryl lipid A (3D-MPL), a glucopyranosyl lipid adjuvant (GLA), a second-generation Lipid Adjuvant (SLA), a phospholipid dimer connected by a noncarbohydrate backbone and an aminoalkyl glucosaminide phosphate~~, or a derivative thereof; or~~; or
   - a polyacrylic acid polymer salt with a weight average molecular weight Mw in the range of 350 to 650 kDa.

~~7.~~3. An immunogenic composition according to ~~any one of claims~~claim 1 ~~to 4~~or 2, wherein said Th1-inducing adjuvant comprises a TLR-4 agonist.

~~8.~~4. An immunogenic composition according to claim ~~5~~3, wherein said TLR4 agonist is in combination with a delivery system such as aqueous nanosuspension, calcium phosphate, liposomes, virosomes, ISCOMs, micro- and nanoparticles, or emulsions.

9.5. An immunogenic composition according to claim 64, wherein said delivery system is an oil-in-water emulsion.

10.6. An immunogenic composition according to any one of claims 53 to 75, wherein said TLR-4 agonist is chosen from E6020 (CAS number: 287180-63-6) and a GLA (CAS Number 1246298-63-4) TLR-4 agonist.

7. An immunogenic composition according to any one of claimsclaim 3, wherein said Th1-inducing adjuvant comprising a TLR-4 agonist is AS01 or AS02.

11.8. An immunogenic composition according to claim 1 to 4or 2, wherein said Th1-inducing adjuvant comprises a linear or branched polyacrylic acid polymer salt with a weight average molecular weight Mw in the range of 350 to 650 kDa.

12.9. An immunogenic composition according to claim 98, wherein said linear or branched polyacrylic acid polymer salt is PAA225000.

13.10. An immunogenic composition according to any one of the preceding claims, wherein said HCMV gB antigen comprises one or several mutations at the endoproteolytic cleavage site.

14.11. An immunogenic composition according to any one of claims 1 to 1110, wherein said HCMV gB antigen is a full length gB polypeptide, a full length gB polypeptide lacking at least a portion of the transmembrane domain, a full length gB polypeptide lacking substantially all the transmembrane domain, a full length gB polypeptide lacking at least a portion of the intracellular domain, a full length gB polypeptide lacking substantially all the intracellular domain, or a full length gB polypeptide lacking substantially both the transmembrane domain and the intracellular domain.

15.12. An immunogenic composition according to any one of claims 1 to 1211, wherein said HCMV gB antigen is gBdTm.

13. An immunogenic composition according to any one of the preceding claims, wherein in the said HCMV gH/gL/UL128/UL130/UL131 pentameric complex antigen, the gH antigen lacks at least a portion of the transmembrane domain, preferably.

~~16.~~14. An immunogenic composition according to claim 13 wherein the gH antigen lacks substantially all the transmembrane domain.

~~17.~~15. An immunogenic composition according to claim 13 or 14 wherein said gH comprises the ectodomain of the full length gH encoded by UL75 gene.

~~18.~~16. An immunogenic composition according to any one of the preceding claims, wherein the HCMV gB and the HCMV gH/gL/UL128/UL130/UL131 pentameric complex are the sole HCMV antigens.

~~19.~~17. An immunogenic composition according to any one of claims 1 to 16 ~~for use~~when used as an HCMV vaccine.

18. ~~An~~ Use of an immunogenic composition ~~for use~~ according to ~~claim 17, wherein said vaccine increases neutralizing antibody levels and/~~any one of claims 1 to 16 for the preparation of a medicament for treatment or ~~persistence.~~ prophylaxis against HCMV.