CLAIMS

1. A pharmaceutical composition comprising a mixture of two separate components, said components being (i) a particulate antigen having one or more epitopes from HIV Gag and/or Pol proteins and ii a non-pathogenic bacterium.

2. The pharmaceutical composition according to claim 1, wherein said particulate antigen is selected from virus particles, virus-like particles, recombinant virus particles, conjugate viral proteins and concatemer viral proteins.

3. The pharmaceutical composition according to claim 2, wherein said recombinant virus particles or said virus particles are inactivated.

4. The pharmaceutical composition according to anyone of claims 1 to 3, wherein said bacterium is selected from attenuated pathogenic bacteria, inactivated (optionally, also attenuated) pathogenic bacteria, and non-pathogenic lactic acid bacteria.

5. The pharmaceutical composition according to claim 4, wherein said bacterium is a *Lactobacillus* bacterium.

6. The pharmaceutical composition according to anyone of claims 1 to 5, which is a mucosal or intradermal or intraepithelial pharmaceutical composition.

7. The pharmaceutical composition according to claim 6, which is an oral pharmaceutical composition.

8. The pharmaceutical composition according to anyone of claims 1 to 7, for preventing and/or treating an HIV disease in a human in need thereof.

9. The pharmaceutical composition according to anyone of claims 1 to 7, for protecting a human against HIV.

10. The pharmaceutical composition according to anyone of claims 1 to 7, for protecting a human from HIV seroconversion.

11. The pharmaceutical composition according to anyone of claims 1 to 10, which induces and preferably maintains an antigen-specific immune protection against HIV in a human.

12. The pharmaceutical composition according to claim 11, wherein said immune protection is characterized by the reduction and preferably the suppression of an HIV viral load in said human.

~~13. The pharmaceutical composition according to claim 11 or 12, wherein said immune protection is characterized by CD8+ regulatory T cells suppressing the activation of HIV Gag and/or Pol antigen-presenting CD4+T cells in said human.~~

~~14~~13. The pharmaceutical composition according to claim ~~13~~11 or 12, wherein said immune protection is determined in said human by *in vitro* detecting the presence or the activity of CD8+ regulatory T cells from said human and wherein said CD8+ regulatory T cells are MHC-Ib/E-restricted CD8+ regulatory T cells.

~~15~~14. A pharmaceutical kit for preventing and/or treating an HIV disease in a human in need thereof, comprising:

- in a first container, a particulate antigen having one or more epitopes from HIV Gag and/or Pol proteins; and

- in a second container, a non-pathogenic living bacterium,

said antigen and said bacterium being in pharmaceutically acceptable carriers for mucosal or intradermal or intraepithelial administration.

~~16~~15. Use of a pharmaceutical composition according to any one of claims 1 to 7 in the manufacture of a medicament for preventing and/or treating an HIV disease in a human in need thereof.

~~17~~16. Use of a pharmaceutical composition according to any one of claims 1 to 7 in the manufacture of a medicament for protecting a human against HIV.

~~18~~17. Use of a pharmaceutical composition according to any one of claims 1 to 7 in the manufacture of a medicament for protecting a human from HIV seroconversion.

~~19~~18. The use according to anyone of claims ~~16 to 18~~15 to 17, wherein the medicament induces and preferably maintains an antigen-specific immune protection against HIV in a human.

~~20~~19. The use according to claim ~~19~~18, wherein said immune protection is characterized by the reduction and preferably the suppression of an HIV viral load in said human.

~~21. The use according to claim 19 or claim 20, wherein said immune protection is characterized by CD8+ regulatory T cells suppressing the activation of HIV Gag and/or Pol antigen-presenting CD4+T cells in said human.~~

~~22~~20. The use according to claim ~~19~~18 or claim ~~20~~19, wherein said immune protection is determined in said human by *in vitro* detecting the presence or the activity of CD8+ regulatory T cells from said human and wherein said CD8+ regulatory T cells are MHC-Ib/E-restricted CD8+ regulatory T cells.