7. The adenoviral vector of any of claims 1 to 6, further comprising an exogenous nucleotide sequence of interest that encodes a protein or polypeptide.

8. The adenoviral vector of claim 7, wherein said protein or polypeptide is selected from the group comprising an antigen, a molecular adjuvant, an immunostimulatory protein or a recombinase.

9. The adenoviral vector of claim 8, wherein the antigen is a pathogen-derived antigen.

10. The adenoviral vector of claim 9, wherein the pathogen is selected from the group consisting of *M. tuberculosis*, *Plasmodium sp*, influenza virus, HIV, *Hepatitis C virus*, *Cytomegalovirus*, *Human papilloma virus*, rabies virus, measles virus, mumps, rubella, zika virus, leishmania parasites or *Mycobacterium* sp..

11. The adenoviral vector of claim 10, wherein said antigen is from Mycobacterium avium subspecies paratuberculosis (MAP).

12. The adenoviral vector of claim 10, wherein the antigen is rabies virus glycoprotein.

13. The adenoviral vector of claim 7, wherein said exogenous nucleotide sequence of interest is an miRNA or immunostimulatory RNA sequence.

14. An immunogenic composition comprising the adenovirus vector according to any of claims 1 to 13 and optionally one or more additional active ingredients, a pharmaceutically acceptable carrier, diluent, excipient or adjuvant.

15. The immunogenic composition of claim 14 for use in medicine.

16. Use of the immunogenic composition according to claim 15 in the manufacture of a medicament for treating a disease selected from the group

comprising tuberculosis and other mycobacterial infections including Johne's disease, Crohn's disease, malaria, influenza, HIV/AIDS, Hepatitis C virus infection, Cytomegalovirus infection, Human papilloma virus infection, adenoviral infection, leishmaniasis, *streptococcus spp.* infection, *staphylococcus spp.* infection, *meningococcus spp.* infection, foot and mouth disease, chikungunya virus infection, Zika virus infection, rabies, Crimean Congo haemorrhagic fever, Ebola virus infection, Marburg, Lassa fever, MERS and SARS coronavirus diseases, Nipah and Rift Valley fever, and Chikungunya.

17. The immunogenic composition according to claim 15 or the use according to claim 16, wherein the disease is selected from the group consisting of tuberculosis and other mycobacterial infections, and rabies.

18. The immunogenic composition according to claim 15 or the use according to claim 16 or 17, wherein said use comprises delivering a transgene into a host cell.

19. The immunogenic composition according to claim 15 or the use according to claim 16 or 17, wherein said use comprises eliciting an immune response in an animal.

20. The immunogenic composition according to claim 15 or the use according to claim 16 or 17, wherein said use comprises boosting an immune response in an animal.

21. The immunogenic composition according to claim 15 or the use according to claim 16 or 17, wherein said use comprises treating or preventing at least one disease.

22. The immunogenic composition of claim 15, wherein said use comprises inducing an immune response in an animal that will break tolerance to a self-antigen.

23. The immunogenic composition of claim 15, wherein said use comprises gene therapy.

24. A polynucleotide sequence encoding the adenoviral vector of any of claims 1 to 13.