CLAIMS

1. A trypanosome antigen consisting of the amino acid sequence of SEQ ID NO: 6.

2. An immunogenic composition comprising one or more trypanosome antigens and one or more adjuvants, wherein the one or more trypanosome antigens comprise the amino acid sequence of SEQ ID NO: 6, or a peptide having at least 80% sequence identity to the amino acid sequence of SEQ ID NO: 6 or fragments thereof, wherein a fragment is at least 7 and at most 34 amino acids in length, or a peptide of at most 34 amino acids and having at least 7 contiguous amino acids from the amino acid sequence of SEQ ID NO: 6.

3. The immunogenic composition according to Claim 2, wherein the one or more trypanosome antigens comprise the amino acid sequence of SEQ ID NO: 6.

4. The immunogenic composition according to Claim 2, wherein the one or more trypanosome antigens further comprise the amino acid sequence of SEQ ID NO: 9, or a peptide having at least 80% amino acid identity to the amino acid sequence of SEQ ID NO: 9, or a peptide of at most 33 amino acids and having at least 7 contiguous amino acids from the amino acid sequence of SEQ ID NO: 9.

5. The immunogenic composition according to Claim 2, wherein the one or more trypanosome antigens further comprise the amino acid sequence of SEQ ID NO: 5, or a peptide having at least 80% amino acid identity to the amino acid sequence of SEQ ID NO: 5, or a peptide of at most 39 amino acids and having at least 7 contiguous amino acids from the amino acid sequence of SEQ ID NO: 5.

6. The immunogenic composition according to Claim 2, wherein the one or more trypanosome antigens further comprise the amino acid sequence of SEQ ID NO: 5, or a peptide having at least 80% amino acid identity to the amino acid sequence of SEQ ID NO: 5, or a peptide of at most 39 amino acids and having at least 7 contiguous amino acids from the amino acid sequence of SEQ ID NO: 5 and the amino acid sequence of SEQ ID NO: 9, or a peptide having at least 80% amino acid identity to the amino acid sequence of SEQ ID NO: 9, or a peptide of at most 33 amino acids and having at least 7 contiguous amino acids from the amino acid sequence of SEQ ID NO: 9.

7. The immunogenic composition according to Claim 2, wherein the one or more trypanosome antigens comprise the amino acid sequence of SEQ ID NO: 5, the amino acid sequence of SEQ ID NO: 6 and the amino acid sequence of SEQ ID NO: 9, respectively.

8. The immunogenic composition according to Claim 3, wherein the one or more trypanosome antigens further comprise the amino acid sequence of SEQ ID NO: 7, or a peptide having at least 80% amino acid identity to the amino acid sequence of SEQ ID NO: 7, or a peptide of at most 35 amino acids and having at least 7 contiguous amino acids from the amino acid sequence of SEQ ID NO: 7, the amino acid sequence of SEQ ID NO: 8, or a peptide having at least 80% amino acid identity to the amino acid sequence of SEQ ID NO: 8, or a peptide of at most 30 amino acids and having at least 7 contiguous amino acids from the amino acid sequence of SEQ ID NO: 8, and the amino acid sequence of SEQ ID NO: 11, or a peptide having at least 80% amino acid identity to the amino acid sequence of SEQ ID NO: 11, or a peptide of at most 33 amino acids and having at least 7 contiguous amino acids from the amino acid sequence of SEQ ID NO: 11.

9. The immunogenic composition according to Claim 3, wherein the one or more trypanosome antigens further comprise the amino acid sequence of SEQ ID NO: 2, or a peptide having at least 80% amino acid identity to the amino acid sequence of SEQ ID NO: 2, or a peptide of at most 30 amino acids and having at least 7 contiguous amino acids from the amino acid sequence of SEQ ID NO: 2, the amino acid sequence of SEQ ID NO: 7, or a peptide having at least 80% amino acid identity to the amino acid sequence of SEQ ID NO: 7, or a peptide of at most 35 amino acids and having at least 7 contiguous amino acids from the amino acid sequence of SEQ ID NO: 7, the amino acid sequence of SEQ ID NO: 8, or a peptide having at least 80% amino acid identity to the amino acid sequence of SEQ ID NO: 8, or a peptide of at most 30 amino acids and having at least 7 contiguous amino acids from the amino acid sequence of SEQ ID NO: 8, the amino acid sequence of SEQ ID NO: 9, or a peptide having at least 80% amino acid identity to the amino acid sequence of SEQ ID NO: 9, or a peptide of at most 33 amino acids and having at least 7 contiguous amino acids from the amino acid sequence of SEQ ID NO: 9, and the amino acid sequence of SEQ ID NO: 11, or a peptide having at least 80% amino acid identity to the amino acid sequence of SEQ ID NO: 11, or a peptide of at most 33 amino acids and having at least 7 contiguous amino acids from the amino acid sequence of SEQ ID NO: 11.

10. The immunogenic composition according to Claim 2, wherein the one or more trypanosome antigens further comprise the amino acid sequence of SEQ ID NO: 2, or a peptide having at least 80% amino acid identity to the amino acid sequence of SEQ ID NO: 2, or a peptide of at most 30 amino acids and having at least 7 contiguous amino acids from the amino acid sequence of SEQ ID NO: 2, the amino acid sequence of SEQ ID NO: 5, or a peptide having at least 80% amino acid identity to the amino acid sequence of SEQ ID NO: 5, or a peptide of at most 39 amino acids and having at least 7 contiguous amino acids from the amino acid sequence of SEQ ID NO: 5, the amino acid sequence of SEQ ID NO: 7, or a peptide having at least 80% amino acid identity to the amino acid sequence of SEQ ID NO: 7, or a peptide of at most 35 amino acids and having at least 7 contiguous amino acids from the amino acid sequence of SEQ ID NO: 7, the amino acid sequence of SEQ ID NO: 8, or a peptide having at least 80% amino acid identity to the amino acid sequence of SEQ ID NO: 8, or a peptide of at most 35 amino acids and having at least 7 contiguous amino acids from the amino acid sequence of SEQ ID NO: 8, the amino acid sequence of SEQ ID NO: 9, or a peptide having at least 80% amino acid identity to the amino acid sequence of SEQ ID NO: 9, or a peptide of at most 30 amino acids and having at least 7 contiguous amino acids from the amino acid sequence of SEQ ID NO: 9, and the amino acid sequence of SEQ ID NO: 11, or a peptide having at least 80% amino acid identity to the amino acid sequence of SEQ ID NO: 11, or a peptide of at most 33 amino acids and having at least 7 contiguous amino acids from the amino acid sequence of SEQ ID NO: 11.

11. The immunogenic composition according to Claim 2, wherein the one or more trypanosome antigens comprise the amino acid sequence of SEQ ID NO: 2, the amino acid sequence of SEQ ID NO: 5, the amino acid sequence of SEQ ID NO: 6, the amino acid sequence of SEQ ID NO: 7, the amino acid sequence of SEQ ID NO: 8, the amino acid sequence of SEQ ID NO: 9 and the amino acid sequence of SEQ ID NO: 11, respectively.

12. The immunogenic composition according to Claim 2, wherein the one or more trypanosome antigens are each present in an amount of between about 1 mg to about 1,000 mg.

13. The immunogenic composition according to Claim 2, wherein the one or more adjuvants are each present in an amount of between about 100 µg/mL to about 1,500 µg/mL.

14. The immunogenic composition according to Claim 2, further comprising one or more pharmaceutical acceptable carriers.

15. The trypanosoma antigen as defined in Claim 1 or an immunogenic composition as defined in any one of Claims 2-14 for use as a medicament.

16. Use of the Trypanosoma antigen as defined in Claim 1 or immunogenic composition as defined in any one of Claims 2-14 in the manufacture of a medicament for the treatment of an individual infected with a Trypanosoma pathogen.

17. The use according to Claim 16, wherein the Trypanosoma antigen or the immunogenic composition is in an amount sufficient to reduce one or more physiological conditions or symptom associated with a trypanosome infection or pathology.

18. The use according to Claim 16, wherein the Trypanosoma antigen or the immunogenic composition is in an amount sufficient to increase, induce, enhance, augment, promote or stimulate trypanosome clearance or removal, or decrease, reduce, inhibit, suppress, prevent, control, or limit transmission of trypanosome to another individual.

19. The use according to Claim 16, wherein the Trypanosoma antigen or the immunogenic composition is in an amount sufficient to reduce, decrease, suppress, limit, control or inhibit trypanosome pathogen numbers or titer; reduce, decrease, suppress, limit, control or inhibit trypanosome pathogen proliferation or replication; reduce, decrease, suppress, limit, control or inhibit the amount of a trypanosome protein synthesized; or reduce, decrease, suppress, limit, control or inhibit the amount of a trypanosome pathogen nucleic acid replicated.

20. The use according to Claim 16, wherein the Trypanosoma antigen or the immunogenic composition is in an amount sufficient to protect the individual against a trypanosome infection or pathology.

21. The use according to any one of Claims 16-20, in the manufacture of a medicament for the treatment of a Chagas disease or an African sleeping sickness.