6.2.2 Animals

6.2.3 Preparation of soluble *L. donovani* promastigote antigen

6.2.4 Patients and isolation of peripheral blood mononuclear cells (PBMCs)

6.2.5 Treatment of *L. donovani* infected hamsters and isolation of mononuclear cells (lymph node cells)

6.2.6 Immunological assays

6.3 Results:

6.3.1 The recombinant Th1 stimulatory proteins (rLdADHT, and rLdTTPR,) induced lymphoproliferative and NO responses in normal/infected/cured hamsters:

6.3.2 The recombinant proteins (rLdADHT and rLdTTPR) stimulate PBMCs from Leishmania infected cured/endemic contacts to proliferate and to express a predominant Th1 Cytokines Profile:

6.4 Discussion

7. Prophylactic efficacy of recombinant protein against *Leishmania* challenges

7.1 Introduction

7.2 Materials & Method

7.2.1 Parasite

7.2.2 Animals

7.2.3 Vaccination schedule and assessment of parasitic burden

7.2.4 Immunological assays

7.3 Results

7.3.1 Assessment of parasitic burden in hamsters vaccinated with rLdADHT+BCG and challenged with *L. donovani*

7.3.2 Immunological Responses (DTH, mitogenic and Leishmania-specific cellular responses)

7.3.3 Estimation of mRNA cytokines in rLdADHT+BCG vaccinated hamsters as well as in control groups

7.3.4 Estimation of antibody response in rLdADHT+BCG vaccinated hamsters

7.4 Discussion

7.5 Conclusions

8. Summary

Bibliography

Publications