ANTIGENS FROM *LEPTOSPIRA INTERROGANS* PRESENTED AS PURIFIED PROTEINS OR LIVE RECOMBINANT SALMONELLA VACCINE

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Leptospirosis is an important zoonosis representing high cost for public health system. The goal of our work is to identify antigens, testing their potential to induce protective immunity. The genome of *Leptospira interrogans* serovar Copenhageni was analyzed looking for these antigens. Two systems of antigen presentation are being tested: purified protein and live recombinant vaccine based on attenuated salmonella (SL3261). Eight chosen genes (LIC10191, LIC10793, LIC11227, LIC12302, LIC13101, LIC12659, LIC10868 and LIC12631) were cloned in vector pAE to produce the recombinant proteins and in vector pAEsox for *in vivo* expression, using salmonellas as carrier. (sox system can be activated *in vivo* by oxidative stress and *in vitro* by paraquat). Two antigens (LIC10191 and LIC10793) were used to immunize mice either with purified proteins or live recombinant salmonellas, to investigate differences in the immune response. Purified proteins induced high titles of antibodies while recombinant salmonellas raised low level of antibodies against leptospiral antigens. The antibodies are being used for MAT (microscopic agglutination test) and for testing the conservation of the antigen in different strains of leptospira. Recognition of the antigens by sera of leptospirosis patients is also being tested. The same antigens are now being used for hamster immunization for challenge assay and measurement of protective capacity against leptospira infections. **Supported by**: FAPESP, CNPq and Fundação Butantan