

Salmonella typhi Ty2 OmpC porin induces bactericidal activity on U937 monocytes

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The immunogenic effect of *Salmonella typhi* OmpC porin during typhoid fever in humans was evaluated in vitro. Peripheral blood mononuclear cells from 17 patients were challenged with outer membrane preparations from *Escherichia coli* UH302 and UH302/pSTP2K2 strains, both lacking *E. coli* OmpF and OmpC porins, although UH302/pSTP2K2 expressed a plasmid-encoded *S. typhi* Ty2 OmpC. The mononuclear cell supernatants, immunized in vitro with OmpC antigen, derived from 10 out of 17 patients activated U937 bactericidal capacity. In contrast, the supernatants from the immunization with outer membrane preparation lacking *S. typhi* Ty2 OmpC induced a significantly reduced bactericidal capacity of U937 cells. This procedure should prove useful for in vitro characterization of cellular immunogens from exclusive human pathogens.