# INTRODUCTION

Typhoid fever caused by Salmonella typhi remains an important public health problem in many parts of the world *(Song et al., 1993)* as it is a major cause of morbidity and mortality in developing countries *(Carmeli et al., 1993)*.

Salmonella Typhi infection is sometimes difficult to diagnose *(Murphy, 1993)* owing to the emergence of multiresistant strains of salmonella typhi in recent years in many tropical countries *(Trans et al., 1995)*.

The classical and the most commonly used serological method, the widal test, is particularly unreliable with single titres in endemic areas *(Levine et al., 1978 and Wicks et al., 1974)*.

Blood culture, however, can detect only 45 to 70% of patients with typhoid fever, depending on: the amount of blood sample, the bacteremic level of salmonella typhi, the type of culture medium used, and the length of incubation period *(Guerra-Cceras et al., 1979 and Hoffman et al., 1986)*.

Although several serological assays for detecting salmonella typhi antigens or antibodies have been used for their rapidity and simplicity, no nonculture tests for typhoid fever have repeatedly been shown to be highly sensitive and specific *(Edelman and Levine, 1986)*, therefore, detection of salmonella typhi by a rapid and sensitive diagnostic method as polymerase chain reaction (P.C.R) has a practical importance in endemic areas *(Song et al., 1993)*.