# Advantage Typhi IgM & IgG Card



Rapid visual test for the differential and simultaneous detection of S. typhi IgM & IgG antibodies in Human Serum / Plasma

- Rapid qualitative test for differential detection of Salmonella typhi (S.typhi) IgM and IgG Antibodies in Human Serum / Plasma
- Determination of both recent and past infection
- Results within 20 minutes
- Bio-hazard free, fully covered, see-through Device
- Simple & Easy to use Test Procedure
- No Instruments required
- Long Shelf Life: 30 months at 2-30°C
- Convenient Packsize: 5 Tests, 10 Tests, 25 Tests & 50 Tests

#### Higher Sensitivity & Specificity:

<u>For IgM:</u>	<u>For IgG:</u>
Sensitivity: 100%*	Sensitivity: 100%*
Specificity: 100%*	Specificity: 100%*

\* The performance with regard to sensitivity & specificity was checked in comparison of commercially available Kit





### **TYPHOID:** An overview

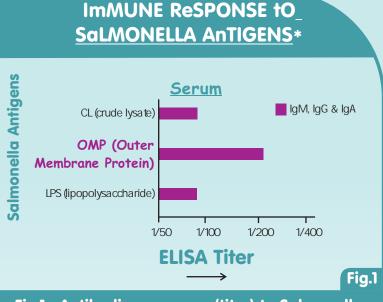
Typhoid fever, is a common worldwide illness, transmitted by the ingestion of food or water contaminated with the feces of an infected person, which contain the bacterium Salmonella enterica, serovar Typhi. This fever received various names, such as gastric fever, abdominal typhus, infantile remittent fever, slow fever, nervous fever, pythogenic fever, etc. The name of "typhoid" was given by Louis in 1829, as a derivative from typhus.

Typhoid is a communicable disease and it is transmitted in many ways in India. The main source of fever is polluted water. Unhygienic conditions in surroundings are mainly responsible for the prevalent infection.

## **OMP: A Superior Marker in Typhoid Diagnosis**

The porin OMP (Outer Membrane Protein) of S. typhi is synthesized into the outer membrane of bacterium. OMP is expressed notonly under free living conditions, butalso during infection, since the osmolarity of the human serum is equivalent to high salt conditions maintained in the laboratory (Nikaido and Vaara 1985). These reasons suggest that OMP is a candidate antigen for diagnostics. Identification and synthesis of specific antigenic sites of S. typhi porin OMP is of help in early diagnosis of typhoid. Advantages of OMP are:

- OMP Antigens (especially the porins) is more Immunogenic than the LPS antigen.
- The level of antibodies (both IgM & IgG) generated againstS. typhi OMP Antigen is significantly higher as generated against the LPS Antigen of S. typhi.
- OMPs are more stable than LPS Antigens and remains in the Blood for longer period of time.



## Fig.1 : Antibodies response (titer) to Salmonella antigens in serum (by ELISA).

\*Source : http://www.nih.go.jp/JJID/60/220.pdf

