Native Salmonella Typhimurium Cells, Heat-Inactivated

Cat. No. SAL-574 **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Heat-killed Salmonella typhimurium cells in dextran solution. Antigen is intended for use as a positive control in immunoassay development for Salmonella detection.
Background	The bacterial genus, Salmonella are rod-shaped, gram-negative, facultative anaerobic bacilli, that belong to the family Enterobacteriaceae. The genus is divided into two species groups, Salmonella enterica and Salmonella bongori. S. enterica is further divided into six subspecies which includes S. enterica subspecies enterica. Salmonella typhi is a serovar of this subspecies and is classified as Salmonella enterica serovar typhi. Both S. typhi and S. paratyphi belong to the same subspecies and are generally referred to as Salmonella. Infection caused by S. typhi or S. paratyphi is generally referred to as typhoid fever. Typhoid fever is an acute systemic illness caused by Salmonella enterica serovar Typhi which leads to infections in children and adults resulting in high morbidity (Paul & Bandyopadhyay, 2017). S. enterica are noncapsulated, nonsporulating, facultative anaerobic bacilli, which contain in their outer membrane a group of proteins (OMPs) which include Braun's lipoprotein, the porins (ompC, ompF, ompD, phoE, etc.) and the heat-modifiable protein (Omp A). The cell outer membrane proteins (OMPs) play an essential role in adaptation to environmental conditions, motility, adherence, and host cell colonization. These proteins also function in the transmembrane transport of nutrients and ions and play a significant role in the injection of toxins and cellular proteases, as well as the formation of channels for the removal of antibiotics (efflux pumps). There are only a few vaccines licensed for use in humans which all target Salmonella enterica serovar Typhi. Vaccine development is hampered by antigenic diversity

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

	between the thousands of serovars capable of causing infection in humans. However, a number of attenuated candidate vaccine strains are currently being developed (Sears et al., 2021).
Notes	This product is intended for research and manufacturing uses only. It is not a diagnostic device. The user assumes all responsibility for care, custody and control of the material, including its disposal, in accordance with all regulations.
Type	Native
ClassID 1	Infectious Disease

GENE INFORMATION

Synonyms	Salmonella Typhimurium

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA