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Immunologic Studies on GroEL
Heat Shock Protein of *Salmonella typhi*.

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LIST OF ABBREVIATIONS

Standard scientific abbreviations were used. However the reader's attention is drawn to the following:

%	percentage
µl	microlitre
(v/v)	volume per volume
(w/v)	weight per volume
ABTS	2,2'-azino-di(3-ethyl-benzthiazoline sulfonate)
DAB	3',3-diaminobenzidine tetrahydrochloride
DCC	dicyclohexyl carbodiimide
DMF	N,N-dimethylformamide
DNA	deoxyribonucleic acid
ELISA	enzyme linked immunosorbent assay
F-moc	9-fluorenylmethyloxycarbonyl
HOBt	1-hydroxy-benzotriazole
IFA	indirect immunofluorescence
Ig	Immunoglobulin
kDa	kilodalton
LPS	lipopolysaccharide
PBS	phosphate buffered saline
PCR	polymerase chain reaction
PIP	piperidine
RNA	ribonucleic acid
Trt	trityl

Abstract

The Multipin Peptide Method was used to synthesize a series of 122, 9-mer peptides based on the published sequence of the *Salmonella typhi* GroEL on the surface of polyethylene pins. These peptides were then screened with a monoclonal antibody to GroEL, with human sera from patients with typhoid fever and with sera from normal healthy blood donors. Screening of the human sera identified three immunogenic epitopes, corresponding to peptides EGQDRGYSY, YSYNKETGE and GKGTEEKEK. Screening of the peptides with the monoclonal antibody to GroEL identified another peptide, KGGKGTEEK, which contains a common overlapping peptide GKGTEEKEK. Identification and characterization of these epitopes would prove useful in delineating the biological and immunological functions of this protein and would aid in the development of better diagnostic tests and vaccines.