

A Comprehensive Analysis of LACK (Leishmania Homologue of Receptors for Activated C Kinase) in the Context of Visceral Leishmaniasis

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Abstract : The Leishmania homologue of activated C kinase (LACK) is known T cell epitope from soluble Leishmania antigens (SLA) that confers protection against Leishmania challenge. This antigen has been found to be highly conserved among Leishmania strains. LACK has been shown to be protective against *L. donovani* challenge. A comprehensive analysis of several LACK sequences was completed. The analysis shows a high level of conservation, lower variability and higher antigenicity in specific portions of the LACK protein. This information provides insights for the potential consideration of LACK as a putative candidate in the context of visceral Leishmaniasis vaccine target.

Keywords : bioinformatics, genome assembly, leishmania activated protein kinase c (lack), next-generation sequencing

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