



Library Indian Institute of Science Education and Research Mohali



DSpace@IISERMohali / Thesis & Dissertation / Master of Science / MS-17

Please use this identifier to cite or link to this item: <http://hdl.handle.net/123456789/4246>

Title:	Modulation of the intestinal adaptive immune network by vibrio cholerae ompu
Authors:	Ajith, Shreya
Keywords:	intestinal adaptive Modulation immune network
Issue Date:	Apr-2022
Publisher:	IISER Mohali
Abstract:	<p>The Mammalian intestine is constantly exposed to pathogens, non-pathogenic microorganisms, food antigens, etc. The dendritic cell migration and recruitment to the small intestine are crucial for eliciting immune responses against pathogens and, at the same time, for the maintenance of homeostasis. Earlier studies from our lab have shown that the <i>Vibrio cholerae</i> outer membrane porin protein, OmpU, induces pro-inflammatory responses in monocytes and macrophages 1 . Our project aims to see whether the OmpU (<i>Vibrio cholerae</i> outer membrane porin protein) treated intestinal epithelial cells can activate dendritic cells and whether these activated dendritic cells can activate T cells or not. Preliminary observations suggest that the OmpU treated intestinal epithelial cells show increased transcription level expression of specific chemokines, which were important for the migration and chemo-attraction of dendritic cells and lymphocytes to the small intestine. In our study, we used qRT-PCR to validate this result. Furthermore, we differentiated THP-1 human monocytic cells into immature dendritic cells (iDCs) using different methods and experimented to see whether these iDCs are capable of activation. To study the scenario mentioned above in primary cells, we also tried to isolate murine intestinal epithelial cells from BALB/c mice.</p>
URI:	http://hdl.handle.net/123456789/4246
Appears in Collections:	MS-17

Files in This Item:

File	Description	Size	Format	
Yet to obtain consent.pdf		144.56 kB	Adobe PDF	View/Open

Show full item record



Items in DSpace are protected by copyright, with all rights reserved, unless otherwise indicated.