Identification of a novel immunoregulatory signaling pathway exploited by M. tuberculosis in dendritic cells

The causative agent of tuberculosis, Mycobacterium tuberculosis, has infected over a third of the world’s population and poses a massive burden to health care systems and human well-being. Most M. tuberculosis infections are latent and are not cleared fully by the host immune system due to the highly sophisticated infectious machinery employed by the bacterium. The dendritic cell (DC) plays a crucial role in shaping the nature of the immune response after exposure to pathogens, and the interaction between M. tuberculosis and the dendritic cell is of profound importance for the course of infection. During their interaction, the DC is exposed to multiple M. tuberculosis-derived ligands recognized by a range of pattern recognition receptors, but the result is typically an immune response that is not very effective at clearing the bacteria from the host. The reason why the induced immune response is ineffective at clearing the bacteria is not fully understood, but clues may be given in the signaling pathways induced in DCs upon M. tuberculosis-exposure.

General information
State: Published
Organisations: Department of Systems Biology, Cellular Signal Integration
Contributors: Laursen, J. M., Schoof, E., Søndergaard, J. N., Linding, R., Pedersen, S. B.
Pages: 284-285
Publication date: 2013
Peer-reviewed: Yes

Publication information
Journal: Scandinavian Journal of Immunology
Volume: 77
Issue number: 4
ISSN (Print): 0300-9475
Ratings:
BFI (2018): BFI-level 1
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 1
Scopus rating (2017): CiteScore 2.11 SJR 0.891 SNIP 0.621
Web of Science (2017): Impact factor 2.314
Web of Science (2017): Indexed yes
BFI (2016): BFI-level 1
Scopus rating (2016): CiteScore 2.03 SJR 0.979 SNIP 0.644
Web of Science (2016): Impact factor 2.256
BFI (2015): BFI-level 1
Scopus rating (2015): CiteScore 1.97 SJR 0.933 SNIP 0.679
Web of Science (2015): Impact factor 2.27
Web of Science (2015): Indexed yes
BFI (2014): BFI-level 1
Scopus rating (2014): CiteScore 1.91 SJR 0.901 SNIP 0.665
Web of Science (2014): Impact factor 1.739
Web of Science (2014): Indexed yes
BFI (2013): BFI-level 1
Scopus rating (2013): CiteScore 2.05 SJR 0.875 SNIP 0.709
Web of Science (2013): Impact factor 1.882
ISI indexed (2013): ISI indexed yes
Web of Science (2013): Indexed yes
BFI (2012): BFI-level 1
Scopus rating (2012): CiteScore 2.16 SJR 0.89 SNIP 0.742
Web of Science (2012): Impact factor 2.199
ISI indexed (2012): ISI indexed yes
Web of Science (2012): Indexed yes
BFI (2011): BFI-level 1
Scopus rating (2011): CiteScore 2.06 SJR 0.865 SNIP 0.654
Web of Science (2011): Impact factor 2.23
ISI indexed (2011): ISI indexed yes