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Control of dendritic cell activation by *Brucella* BtpA and BtpB

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Several bacterial pathogens have TIR domain-containing proteins that contribute to their pathogenesis. We identified two TIR-containing proteins in *Brucella* spp. that we have designated BtpA and BtpB, respectively. Both effector proteins control dendritic cell maturation. Indeed, they are potent inhibitor of TLR signaling. BtpB is a novel *Brucella* effector that is translocated into host cells and interferes with activation of dendritic cells via seceral TLR pathways. *In vivo* mouse studies revealed that BtpB is contributing to virulence and control of local inflammatory responses with relevance in the establishment of chronic brucellosis. Together, our results show that BtpB is a novel *Brucella* effector that plays a major role in the modulation of host innate immune response during infection.

Biography

Jean-Pierre Gorvel has completed his Ph.D. in 1986 from Aix-Marseille University and postdoctoral studies from the European Molecular Biology Laboratory (EMBL, Hedelberg, Germany). He is the Director of Research at CNRS, the largest Research organization in France and has directed several research entities in France and abroad. He has published more than 130 papers in reputed journals and serving as an editorial board member of several journals and as Editor-in-Chief of Microbial Pathogenesis.

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