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Mechanisms related to the up-regulation of IL-10 expression of dendritic cells by parasite-derived molecule Sj16 from *Schistosoma japonicum*Xi Sun^{1,2}, Fan Yang¹, Jia Shen¹, Zhen Liu¹, Jinyi Liang¹, Huanqin Zheng¹, Mingqiu Fung² and Zhongdao Wu¹¹Sun Yat-sen University, China²Chinese University of Hongkong, China

Schistosomes are parasitic worms' flourishes in the human host despite the development of a pronounced immune response. Understanding how the immune system deals with such pathogens is still daunting a challenge. Initiating regulation of host immune response by releasing some schistosome-derived molecules is an important mechanism of immune evasion of *Schistosoma japonicum*. Previously, our groups have identified a 16 kDa secretory protein, Sj16, from *Schistosoma japonicum*. Sj16 is produced and secreted by all stages of the parasite and confirmed as an important protein in the alleviating of inflammation damage when the cercaria penetrated into the skin and was closely involved in to the immune escape of the Schistosomiasis. Using recombinant Sj16 (rSj16) protein expressed from *E. coli*, we demonstrated that this recombinant protein has a potent strong immuno-modulation effect and significantly alleviate rat adjuvant-induced arthritis (AA). In this study, we confirmed that rSj16 enter into the nuclear of host cells using the NLS1 and promote the production of IL-10 which mediates the inhibitory effect of rSj16 on LPS-induced BMDCs.

Biography

Xi Sun was graduated from Sun Yat-sen University and obtained his PhD degree in 2011. Presently she is an Associate Professor in Department of Parasitology, Sun Yat-sen University, China. Her work focuses on the infection and immunology.

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