The role of SOCS proteins in the negative regulation of JAK-STAT signaling

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In this review, we summarize the current information about the negative regulation of cytokine JAK-STAT signaling by SOCSs in normal immune physiology that also contribute to the development of different pathological conditions such as inflammatory diseases, oncology, pulmonology and allergology. Focusing the discussion on a family of SOCS-proteins, suppressors of cytokine signaling, is very important for a better understanding of immune mechanisms of inflammation, and this knowledge will assist the development of novel therapeutic strategies. (Cytokines and Inflammation. 2012. Vol. 11. № 2. P. 14–22.)

Key words: SOCS, suppressor of cytokine signaling, JAK-STAT, cytokines.