Propolis is a resinous material collected by honeybees from numerous plants and serves as a defense against intruders. Because of its relevant curative properties, it is now gaining popularity in health foods and in cosmetic products. Understanding the underlying molecular mechanisms of phytochemicals has become a good strategy in bioprospection for new anti-inflammatory compounds. The biological activity of propolis derives from its high levels of phenolic acids, while flavonoids are thought to account for the activity of propolis extracts. The comprehension of the relationship between propolis and the immune system has progressed in the last years, recent articles have provided important contributions to this investigation field. Studies have shown that propolis suppressed the "IL-6-induced phosphorylation of signal transducer and STAT3", an essential cytokine-activated transcription factor in Th17 development. Therefore, action mechanisms of "propolis on Th17 differentiation could be instrumental in controlling disturbed cytokine networks in inflammation, autoimmune diseases, and infections." The use of propolis has been proposed in some patents as: WO201363714; CN102885854, WO2013142936, US20130266521, and US20130129808, which are related to the treatment of dental diseases; adjuvant in anti-cancer treatment; in cosmetic products; as an anti-inflammatory agent and natural antibiotic. Although there are many publications regarding the propolis efficacy, its applicability to human health and mechanisms of action are not completely understood, creating opportunities for new studies.