

## **Abstract**

The human body is inhabited by a complex composition of microorganisms. Particularly significant is the intestinal microbiota due to its profound effect on the development and function of the immune system. The ability of the host to defend against pathogens is kept by two important, interrelated components – the mucosal barrier and immune system. The barrier is composed of several layers (gut microbiota, mucus, epithelium, and immune cells) joined into one functional unit. Through its diverse array of structural components and metabolites, the gut microbiota interacts with the epithelium and mucosal immune system, confers to its induction, and modulates immune responses. Disruption of this interplay can contribute to pathogenesis of several diseases.