

Abstract

E3 ubiquitin ligases are a large family of enzymes involved in many cellular processes such as repair of damaged DNA, transport of membrane proteins, chromatin modification, cell cycle and apoptosis. E3 ubiquitin ligase has been shown to play a significant role in the maintenance of intestinal homeostasis, and their abnormal function associated with their deregulation contributes to inflammatory bowel diseases such as ulcerative colitis and Crohn's disease. In recent years, approximately 200 risk loci have been identified that are susceptible to these diseases, including those encoding E3 ubiquitin ligase. 10 of them have been identified. The aim of this work is to compare the already identified E3 ubiquitin ligases associated with these diseases and to give an overview of them with a focus on the regulation of intestinal homeostasis.

Key words: E3, ubiquitination, inflammatory bowel diseases, intestinal homeostasis, CD, UC

