

## عنوان مقاله:

Evaluation of LncRNA uc.1۷۳ and Occludin in Iranian Patients with Inflammatory Bowel Disease Compared with Healthy Individuals

## محل انتشار:

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## خلاصه مقاله:

**Background & Objective:** Inflammatory bowel disease (IBD) is characterized by the chronic gastrointestinal inflammation. The two common forms of IBD are ulcerative colitis (UC) and Crohn's disease (CD) that are distinguished by their location and depth of involvement in the diffuse inflammation of the colonic mucosa and affects the rectum (proctitis). A novel class of LncRNAs transcribed from ultra-conserved regions (UCRs) is a recently identified ultra-conserved region (T-UCR) transcript that is involved in the cellular function in a variety of pathways. However, the regulation of LncRNA uc.1۷۳ in IBD remains to be fully elucidated. In this study, we aimed to examine the expression of LncRNA uc.1۷۳ and Occludin genes in an Iranian population with inflammatory bowel disease. **Materials & Methods:** This case-control study was performed on ۳۳ inflammatory bowel disease patients including ۱۳ Crohn's disease, ۲۰ ulcerative colitis and ۲۰ healthy controls. The mRNA levels of LncRNA uc.1۷۳ and Occludin genes were assessed using the quantitative Real-time polymerase chain reaction. The B۲M was used as an internal control. The  $2^{-\Delta\Delta Cq}$  method was used to determine the expression fold changes. **Results:** Statistically, the level of the LncRNA uc.1۷۳ gene expression between the UC and normal tissues increased significantly ( $P=0.0024$ ). Also, the expression analysis revealed no significant difference between the samples of CD patients compared to the controls ( $P>0.05$ ). In order to further evaluate the role of LncRNA uc.1۷۳ in IBD, the associations between the transcript levels of the LncRNA uc.1۷۳ and Occludin mRNA demonstrated significant difference in the CD tissue ( $R=0.59$ ;  $P=0.002$ ). In our study, the mRNA expression of Occludin gene did not show any changes in the IBD patients compared to the healthy controls. **Conclusion:** The increased expression of LncRNA uc.1۷۳ in the tissues of UC patients may be considered as

a diagnostic or prognostic biomarker. Also, there was no correlation found between Occludin and LncRNA uc.۱۷۳ expressions in the IBD patients' tissues

## کلمات کلیدی:

Inflammatory bowel disease, Ulcerative colitis, Crohn's disease, LncRNA uc.۱۷۳, Occludin

## لینک ثابت مقاله در پایگاه سیویلیکا:

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