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### *Basic Study*

**Identification of differentially expressed genes in ulcerative colitis and verification in a colitis mouse model by bioinformatics analyses**

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### **Abstract**

#### BACKGROUND

Ulcerative colitis (UC) is an inflammatory bowel disease that is difficult to diagnose and treat. To date, the degree of inflammation in patients with UC has mainly been determined by measuring the levels of nonspecific indicators, such as C-reactive protein and the erythrocyte sedimentation rate, but these indicators have an unsatisfactory specificity. In this study, we performed bioinformatics analysis using data from National Center for Biotechnology Information-Gene Expression Omnibus (NCBI-GEO)

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## Identification of differentially expressed genes profiles ...

<https://www.nature.com/articles/s41598-020-69695-4>

Aug 04, 2020 · To address this objective, we combined a dextran sodium sulfate (**DSS**)-induced **ulcerative colitis** experimental **mice model** with an acute 1-methyl-4-phenyl-1,2,3,6-tetradropyridine (MPTP) intoxication.

**Author:** A. L. Gil-Martinez, L. Cuenca-Berme...**Publish Year:** 2020

## Identification of differentially expressed genes ...

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Introduction. Inflammatory bowel diseases (IBDs) are chronic idiopathic inflammatory disorders of the gastrointestinal tract with two distinct phenotypes: **Ulcerative colitis** (UC) and Crohn's disease (CD) (1,2).UC is characterized by relapsing and remitting mucosal inflammation extending from the rectum to proximal segments of the colon ().By contrast, CD may affect the entire digestive tract ...

**Cited by:** 3**Author:** Chunwei Cheng, Juan Hua, Jun Tan, We...**Publish Year:** 2019

## Identification of Gene Expression Changes from Colitis to ...

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3990644>

Apr 17, 2014 · We examined the mRNA expression profiles of three groups: control untreated **mice** (K), **DSS-induced** chronic **colitis mice** (D), and AOM/**DSS-induced** CAC (AD) **mice**. We identified 6301 **differentially expressed genes** (DEGs) among the three groups. including 93 persistently



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Aug 04, 2020 · **Identification of differentially expressed genes** profiles in a combined mouse model of Parkinsonism and **colitis** A. L. Gil-Martinez 1 , 2 L. Cuenca-Bermejo 1 , 2

Author: A. L. Gil-Martinez, L. Cuenca-Bermejo, A... Publish Year: 2020

### Identification of gene expression changes from colitis to ...

<https://europepmc.org/article/MED/24743346> ▾

Apr 17, 2014 · The significant **differentially expressed genes** were defined as the **genes** with fold changes of >2 or <0.5 and with adjusted p values <0.05. The **differentially expressed genes** with fold changes between 2 and 0.5 were removed from subsequent analysis. The significant **differentially expressed genes** between AD and K, D and K, and AD and D were ...

Cited by: 11

Author: Xin Li, Yuyan Gao, Ming Yang, Qi Zhao, Gua...

Publish Year: 2014

### Identification of genes and functional coexpression ...

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A total of 328 **ulcerative colitis** patients and 138 healthy controls were from 14 datasets. The 150 most significant **differentially expressed genes** are likely to include causative **genes** of disease, and further studies are needed to demonstrate this.

**Cited by:** 2

**Author:** Jie Zhu, Zheng Wang, Fengzhe Chen, Ch...

**Publish Year:** 2019

### Identification of gene expression changes from colitis to ...