عنوان مقاله:

Identification and prioritization genes related to Hypercholesterolemia QTLs using gene ontology and protein interaction networks

محل انتشار:

تعداد صفحات اصل مقاله: 6

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خلاصه مقاله:

Gene identification represents the first step to a better understanding of the physiological role of the underlying protein and disease pathways, which in turn serves as a starting point for developing therapeutic interventions. Familial hypercholesterolemia is a hereditary metabolic disorder characterized by high low-density lipoprotein cholesterol levels. Hypercholesterolemia is a quantitative trait that is controlled by interactions among several quantitative trait loci. Many biological data is presented in the context of biological networks and evaluation of biological networks is considered as the essential key to understanding complex biological systems. In this research, we used combination of information about quantitative trait loci of hypercholesterolemia with information of gene ontology and protein–protein interaction network for identification of genes associated with hypercholesterolemia. For this disease, we introduced ۱۶ new genes which were in quantitative trait loci regions and were associated with the hypercholesterolemia disease in terms of gene ontology characteristics.

کلمات کلیدی:

Complex disease, Disease gene prediction, Familial hypercholesterolemia, Protein interaction network, Quantitative trait loci

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