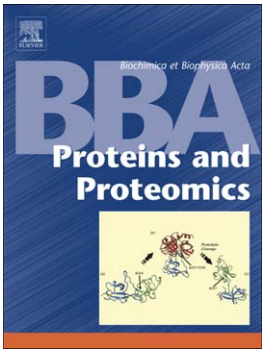

Gene-Centric Content Management System

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Abstract

The Human Proteome Project (HPP) was started two years ago and theinternational consortia have elaborated a number of informational resources to harbor the HPP data. Selected informational resources are currently used to elaborate the HPP baseline metrics, which were introduced to estimate future contribution of HPP to the knowledge domain. We developed a Web-based tool Gene-centric Content Management System (GenoCMS) for comparing public resources to proprietary results by using the representation of proteins as color-coded catalog. Within our CMS, the features of protein-coding genes are uploaded from the public domain and then appended by additional features derived from original experimental workflows. We describe the heat-map/traffic light representation of our proteomic experiments as the background of data taken from NextProt, MS/MS repositories, the Human Protein Atlas and the RNAseqAtlas. The system presented at www.kb18.ru comprises a collaborative knowledge base for annotating the gene sets and disseminating these annotations through the Web.

Keywords:

Human Proteome Project, knowledge base, heat-map, traffic light, track view, integrative bioinformatics