

Resource Summary Report

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MultiFun

RRID:SCR_004363

Type: Tool

Proper Citation

MultiFun (RRID:SCR_004363)

Resource Information

URL: <http://genprotec.mbl.edu/files/MultiFun.html>

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Description: MultiFun is a multifunctional classification scheme for Escherichia coli K-12 gene products. In the classification scheme, cellular functions are divided into 10 major categories: Metabolism, Information Transfer, Regulation, Transport, Cell Processes, Cell Structure, Location, Extra-chromosomal Origin, DNA Site, and Cryptic Gene. These major categories are further sub-divided into a hierarchical scheme. Two thousand nine hundred twenty-two gene products of E. coli K-12 were assigned to one or more functions depending on the role they play in the cell. Functional assignments were made to 66% of E. coli gene products, ranging from 1 to 16 assignments per gene product. The expansion of cellular function categories and the assignment to more than one category (multifunction) provides a more complete description of the gene products and their roles and hence better reflects the functional complexity of organisms. We believe this classification system will be useful in the field of genome analysis, both for annotation purposes and for comparative studies. The functional classification scheme and the cellular function assignments made to E. coli gene products can be accessed from the web at the databases GenProtEC (<http://genprotec.mbl.edu>) and EcoCyc (<http://www.ecocyc.org>).

Abbreviations: MultiFun

Synonyms: MultiFun: a cellfunction assignment schema, MultiFun: a cell function assignment schema

Resource Type: data or information resource, data set

Defining Citation: [PMID:11471834](#)

Funding:**Resource Name:** MultiFun**Resource ID:** SCR_004363**Alternate IDs:** nlx_38338**Record Creation Time:** 20220129T080224+0000**Record Last Update:** 20250422T055147+0000

Ratings and Alerts

No rating or validation information has been found for MultiFun.

No alerts have been found for MultiFun.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 4 mentions in open access literature.

Listed below are recent publications. The full list is available at [FDI Lab - SciCrunch.org](#).

Györkei Á, et al. (2022) Proteome-wide landscape of solubility limits in a bacterial cell. Scientific reports, 12(1), 6547.

Sharma AK, et al. (2020) A novel knock out strategy to enhance recombinant protein expression in Escherichia coli. Microbial cell factories, 19(1), 148.

Chib S, et al. (2017) Genomewide Mutational Diversity in Escherichia coli Population Evolving in Prolonged Stationary Phase. mSphere, 2(3).

Hansen GA, et al. (2012) Expression profiling reveals Spot 42 small RNA as a key regulator in the central metabolism of Aliivibrio salmonicida. BMC genomics, 13, 37.