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L. ARAVIND

National Center for Biotechnology Information, National Library of Medicine, National Institutes of Health, Bethesda, MD 20894, USA; and the Dept of Biology, Texas A&M University, College Station, TX 77843, USA.

EUGENE V. KOONIN

National Center for Biotechnology Information, National Library of Medicine, National Institutes of Health, Bethesda, MD 20894, USA. Email: koonin@ncbi.nlm.nih.gov

Enzymes on the Web



The Enzyme List

The Enzyme List, maintained by the Nomenclature Committee of the International Union of Biochemistry and Molecular Biology (NC-IUBMB), aims to list enzymes, providing each with an identifying enzyme classification (EC) number and recommended name¹. Anyone who works with enzymes or their genes should find this a useful way to refer to them unambiguously. The basis of the classification is the reaction catalysed²; all enzymes that catalyse the same reaction are assigned the same number, irrespective of differences in sequence, structure or origin, although the references given describe these properties.

The List on the Web

Each of the 3000 listed enzymes now appears with its recommended name and number on the World Wide Web (http://www.chem.qmw.ac.uk/iubmb/enzyme/). An increasing number of the entries on the Web site have links to the full specifications, allowing these to be displayed on screen. Such specifications include links to other bioinformatics databases and references to the work that established the existence of the enzyme (e.g. discovery, assay and properties). So far, the entries with links comprise all oxidoreductases, EC 1, many transferases, EC 2, all peptidases, EC 3.4, and all enzymes added or updated since the 1992 edition of *Enzyme Nomenclature*¹. Hence, the absence of such a link implies that the published specification¹ is still valid. Full specifications for the remaining EC numbers should be available on the Web site before July 2000. A glossary is being created to identify the more obscure substrates. A general search facility is provided to find any word or phrase in the list. This can be used, for example, to check if an enzyme is listed, or to find enzymes that catalyse reactions of a particular compound.

Updates

NC-IUBMB also has proposals for changes to *Enzyme Nomenclature*, both listing newly discovered enzymes and updating some older entries. It invites the public to comment on these proposals, which can be viewed at http://www.chem.qmw.ac.uk/ iubmb/enzyme/newenz.html.

In particular, it is revising the list of ATPases and GTPases, and the proposals for this link can be viewed at http://www.chem.qmw.ac.uk/iubmb/enzyme/ATPases.html.

Links to these enzymes are also provided from the main list of enzymes. Suggestions and comments should be sent to Dr S. Boyce, Biochemistry Department, Trinity College, Dublin 2, Ireland, or to sboyce@tcd.ie, by 31st March 2000.

Interaction

NC-IUBMB hopes that the Web site will enable it to respond better to the needs of the biochemical community as knowledge of enzymes advances. Biochemists are invited to submit new information – add an entry for a newly discovered enzyme or modify an existing entry – at any time. This can be done either by filling in the relevant form on the Web site or by sending the information by mail to Dr Boyce.

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