



p53 is expressed as a central Concept connected to broader, narrower, synonymous and co-occurring Concepts as defined by the National Library of Medicine's (NLM) Unified Medical Language System® (UMLS) Metathesaurus®. Developing Concepts from UMLS ensures that our application "understands" the meaning of the language of biomedicine and health.

Navigate Concept Relationships

A Concept Map is an interactive navigation tool for browsing Concept relationships. Each Concept in the map may be selected as a central Concept in a new Concept Map. A History pane to the left of the Concept Map records each successive selection of central Concepts. Concept Maps are generated independent of the navigation tool for preprocessing and the recorded path of central Concept selections may be stored for post processing.

Access Relevant Literature

PubMed® citations relevant to the central Concept are displayed in the right panel adjacent to the Concept Map. Each PubMed® citation is the bibliographic information for one of the over 16 million articles in the MEDLINE® database dating from 1950 to present.

The screenshot displays the araicom Concept Map interface. At the top, the 'araicom LIFE SCIENCES' logo is visible. Below it, a search bar contains 'Concept Search: p53'. The main area shows a concept map with 'Protein p53' as the central node. It is connected to several other concepts: 'TP53 wt Allele', '2-Aminopurine', '4-Hydroxyaminoquinoline-1-oxide', '4-Butyrolactone', 'Heterocyclic Compounds', '4-Aminobenzoic Acid', 'Organic Chemicals', '2-Acetylaminofluorene', '1-Naphthylamine', 'Polycyclic Compounds', 'Narrower', 'Synonyms', 'Broader', 'p53 gene/protein', and 'Tumor Suppressor Proteins'. The right panel lists PubMed citations related to p53, including titles, authors, and PMIDs. The left panel shows a history of searches and a legend for UMLS relationships and MeSH subcategories.

Integrated NLM resources

The Metathesaurus® is a very large biomedical and health vocabulary database built from the electronic versions over 100 "source vocabularies." The vocabularies are representative of thesauri, classifications, code sets, and lists of controlled terms used in patient care, health services billing, public health statistics, indexing and cataloging biomedical literature, and/or basic, clinical, and health services research.

This resource also contains information about Concepts that co-occur in citations in the MEDLINE® (Medical Literature Analysis and Retrieval System Online) database from 1998 to 2008 classified by the NLM Medical Subject Headings® (MeSH) thesaurus.

References for: **Concept Map of p53 with Relevant PubMed® Citations**

http://www.nlm.nih.gov/research/umls/about_umls.html

<http://www.nlm.nih.gov/pubs/factsheets/umlsmeta.html>

http://www.nlm.nih.gov/research/umls/source_faq.html

<http://www.nlm.nih.gov/pubs/factsheets/medline.html>

<http://www.nlm.nih.gov/pubs/factsheets/mesh.html>

<http://www.nlm.nih.gov/pubs/factsheets/pubmed.html>



Find the Hidden Relationships in Biomedical Research

To walk through a demonstration, go to www.araicom.com and click DEMO.

In this self-guided demo, you will be able to:

- Select a biomedical concept
- View the related PubMed® articles
- Select hypotheses supporting available literature

If you have questions about system features or how to use the demo
contact Araicom via e-mail: info@araicom.com