

Concept Map of CREB-Binding Protein with Relevant MEDLINE® Citations

CREB-Binding Protein is expressed as a central Concept connected to co-occurring Concepts mined from the over 16 million articles in the MEDLINE® database dating from 1950 to 2003. The co-occurring Concepts and their semantic type are stored in the Araicom Knowledge Warehouse.

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 Life Sciences web interface. At the top, the logo and navigation links (Welcome, conceptbio, Profile, Sign out, Help) are visible. Below the header, there is a search bar and navigation buttons (Search, Back, Forward). The main content area is divided into three panels:

- History Panel (Left):** Shows the current central concept, "CREB-Binding Protein".
- Concept Map (Center):** A hub-and-spoke diagram with "CREB-Binding Protein" at the center. It is connected to several related concepts:
 - amino acid, peptide, or protein (6)
 - nucleic acid, nucleoside, or nucleotide (9)
 - pharmacologic substance (2)
 - steroid (1)
 - chemical viewed structurally (1)
 - Macromolecular Substances
 - Factor IV Inhibitors, Enzyme
 - all-trans-Retinoic Acid
 - organic chemical (3)
 - trichostatin A
 - Hydroxamic Acids
- Search Results Panel (Right):** Titled "Search results for the query CREB-Binding Protein", it lists five results with their respective authors and abstracts.
 - 1: Lin CH, Chen PS, Gean PW. Glutamate preconditioning prevents neuronal death in Eur J Pharmacol. 2008 Jun 6. [Epub ahead of print] PMID: 18589412 [PubMed - as supplied by publisher]
 - 2: Chen D, He N, Lei K, Xu X. Genomic organization of the translationally controlled Mol Biol Rep. 2008 Jun 28. [Epub ahead of print] PMID: 18587664 [PubMed - as supplied by publisher]
 - 3: Li R, Yue J, Zhang Y, Zhou L, Hao W, Yuan J, Qiang F. CLOCK/BMAL1 regulates human nocturnin transcript Mol Cell Biochem. 2008 Jun 28. [Epub ahead of print] PMID: 18587630 [PubMed - as supplied by publisher]
 - 4: Qi X, Lin W, Li J, Li H, Wang W, Wang D, Sun M. Fluoxetine increases the activity of the ERK-CREB signaling Neurobiol Dis. 2008 May 20. [Epub ahead of print] PMID: 18586506 [PubMed - as supplied by publisher]
 - 5: Chang LC, Tsao LT, Chang CS, Chen CJ, Huang LJ. Inhibition of nitric oxide production by the carbazole compound Biochem Pharmacol. 2008 Jun 10. [Epub ahead of print] PMID: 18586011 [PubMed - as supplied by publisher]

Integrated NLM resources

The Concepts and their relationships and semantic types are defined in the National Library of Medicine's Medical Subject Headings® (MeSH) and Unified Medical Language System® (UMLS) Metathesaurus®. This is a very large biomedical and health vocabulary database built from the electronic versions of over 180 "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. Using Concepts defined by MeSH® and UMLS® ensures that our application "understands" the meaning of the language of biomedicine and health.

References for: **Concept Map of CREB-Binding Protein**

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/pubmed.html>

http://www.nlm.nih.gov/research/umls/META3_current_semantic_types.html



Find the Hidden Relationships in Biomedical Research

To walk through a demonstration video of an Alpha prototype from our prior research, go to www.biocaid.com and click DEMO. In this self-guided demo, you will be able to see how the functionality of the IMDI Profiler organizes and presents relationships between publications and terms to support the visualization, navigation and integration of Concepts and researcher interests in the MEDLINE Library.

If you have questions about system features or our company, please contact BioCAID via e-mail: info@biocaid.com