

HOW TO

Use the New Features

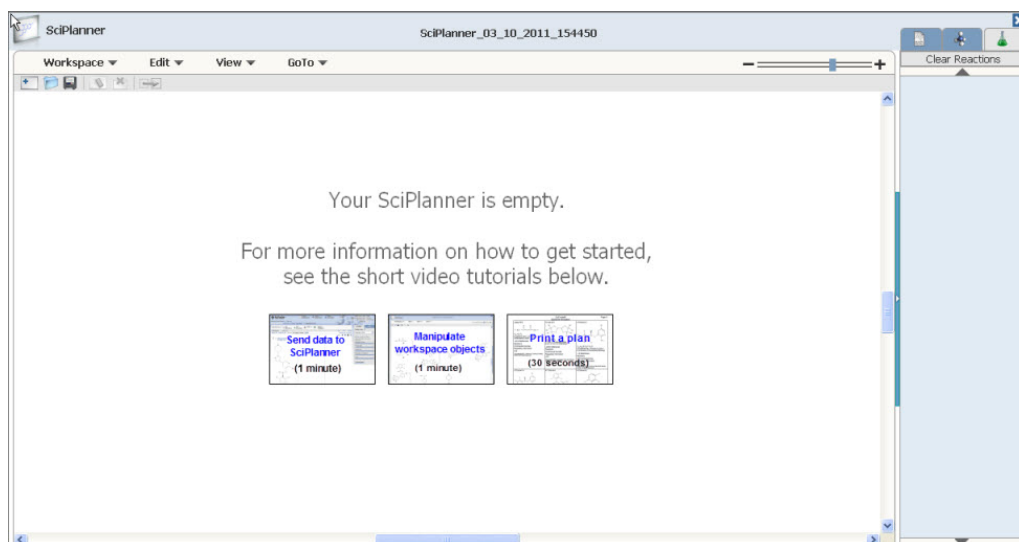
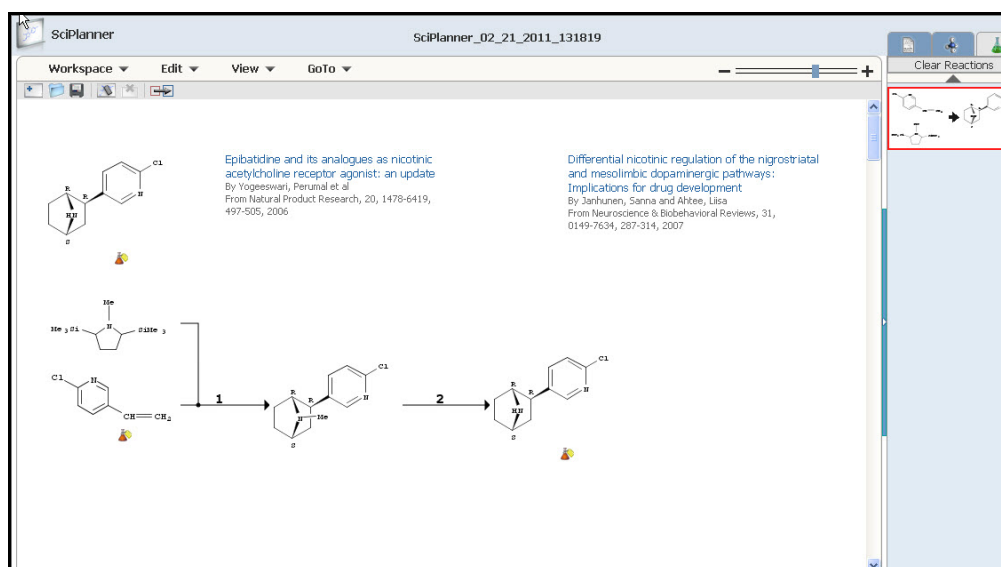


Spring 2011 enhancements to SciFinder® include SciPlanner™ (a new way to organize, view, and manage search results), sorting reference answer sets by number of citing references, copy/paste of ISIS/Draw structures into the SciFinder structure editor, and the addition of citations to MEDLINE® records.

Working with Answer Sets

SciPlanner

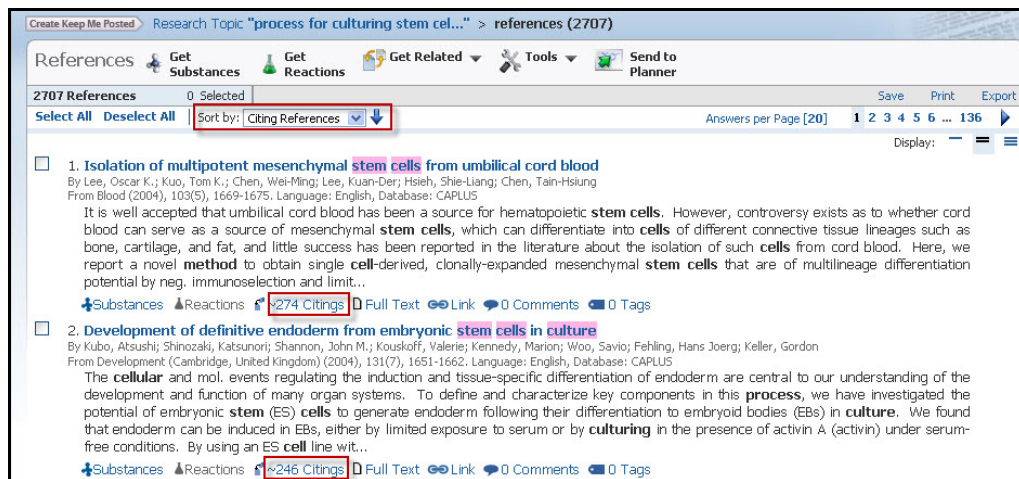
1. This feature allows users to organize and manage search results in chemically intuitive ways.
2. Reference, substance, and reaction information can all be sent to and organized in one location (workspace). Reaction schemes can be easily combined and visualized.
3. Short introductory videos are available to demonstrate how to use SciPlanner.



Results Display

Sort Reference Answer Sets by Citing References

Quickly identify historically influential papers and authors by sorting reference answer sets by the number of Citing References.



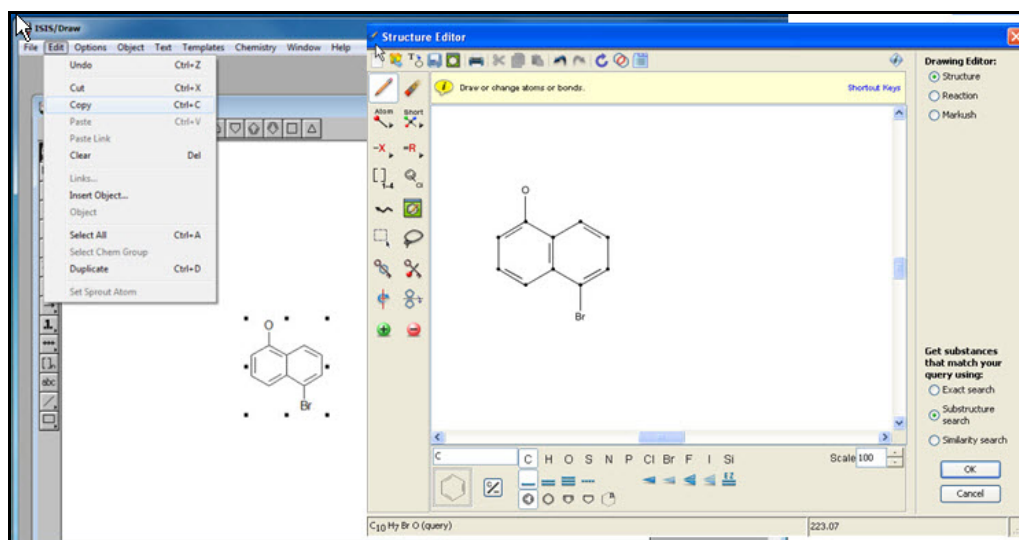
The screenshot shows a web interface for a research topic: "process for culturing stem cel...". The page displays 2707 references. A dropdown menu is set to "Sort by: Citing References". Two references are visible, each with a "Citing References" count highlighted in a red box:

- 1. **Isolation of multipotent mesenchymal stem cells from umbilical cord blood**
By Lee, Oscar K.; Kuo, Tom K.; Chen, Wei-Ming; Lee, Kuan-Der; Hsieh, Shie-Liang; Chen, Tain-Hsiung
From Blood (2004), 103(5), 1669-1675. Language: English, Database: CAPLUS
It is well accepted that umbilical cord blood has been a source for hematopoietic stem cells. However, controversy exists as to whether cord blood can serve as a source of mesenchymal stem cells, which can differentiate into cells of different connective tissue lineages such as bone, cartilage, and fat, and little success has been reported in the literature about the isolation of such cells from cord blood. Here, we report a novel method to obtain single cell-derived, clonally-expanded mesenchymal stem cells that are of multilineage differentiation potential by neg. immunoselection and limit...
Substances Reactions **274 Citings** Full Text Link Comments Tags
- 2. **Development of definitive endoderm from embryonic stem cells in culture**
By Kubo, Atsushi; Shinozaki, Katsunori; Shannon, John M.; Kouskoff, Valerie; Kennedy, Marion; Woo, Savio; Fehling, Hans Joerg; Keller, Gordon
From Development (Cambridge, United Kingdom) (2004), 131(7), 1651-1662. Language: English, Database: CAPLUS
The cellular and mol. events regulating the induction and tissue-specific differentiation of endoderm are central to our understanding of the development and function of many organ systems. To define and characterize key components in this process, we have investigated the potential of embryonic stem (ES) cells to generate endoderm following their differentiation to embryoid bodies (EBs) in culture. We found that endoderm can be induced in EBs, either by limited exposure to serum or by culturing in the presence of activin A (activin) under serum-free conditions. By using an ES cell line wit...
Substances Reactions **246 Citings** Full Text Link Comments Tags

Finding Information

Copy/paste from ISIS/Draw to SciFinder Structure Editor

1. For customers who use ISIS/Draw as their structure drawing tool, it is now possible to draw the structure once and then copy/paste from ISIS/Draw to the SciFinder structure editor.



The screenshot shows two windows side-by-side. On the left is the ISIS/Draw application with a menu open showing "Copy" and "Paste" options. On the right is the SciFinder Structure Editor window, which displays the chemical structure of 2-bromophenol (SMILES: Oc1ccccc1Br) in the center. The Structure Editor interface includes a toolbar, a search bar with the formula "C10 H7 Br O (query)", and search options like "Exact search", "Substructure search", and "Similarity search".

Citations in MEDLINE records

- The addition of citations to MEDLINE records provides new content and a way to extend searches to cited references.

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2. Biosynthesis and processing of platelet GPIIb-IIIa in human megakaryocytes

Duperray A; Berthier R; Chagnon E; Ryckewaert J J; Ginsberg M; Plow E; Marguerie G

Platelet membrane glycoprotein IIb-IIIa forms a calcium-dependent heterodimer and constitutes the fibrinogen receptor on stimulated platelets. **GPIIb** is a two-chain protein containing disulfide-linked alpha and beta subunits. GPIIIa is a single chain protein. These proteins are synthesized in the bone marrow by megakaryocytes, but the study of their synthesis has been hampered by the difficulty in obtaining enriched population of megakaryocytes in large numbers. To examine the **biosynthesis and processing of GPIIb-IIIa**, purified human megakaryocytes were isolated from liquid cultures of cryopreserved leukocytes stem cell concentrates from patients with chronic myelogenous leukemia. Immunoprecipitation of [³⁵S] methionine pulse-chase-labeled cell extracts by antibodies specific for the alpha or beta subunits of **GPIIb** indicated that **GPIIb** was derived from a precursor of Mr 130,000 that contains the alpha and beta subunits. This precursor was converted to **GPIIb** with a half-life of 4-5 h. No precursor form of GPIIIa was detected. The glycosylation of **GPIIb-IIIa** was examined in megakaryocytes by metabolic labeling in the presence of tunicamycin, monensin, or treatment with endoglycosidase H. The polypeptide backbones of the **GPIIb** and the GPIIIa have molecular masses of 120 and 90 kD, respectively. High-mannose oligosaccharides are added to these polypeptide backbones co-translationally. The **GPIIb** precursor is then processed with conversion of high-mannose to complex type carbohydrates yielding the mature subunits **GPIIb** alpha (Mr 116,000) and **GPIIb** beta (Mr 25,000). No posttranslational **processing** of GPIIIa was detected.

Indexing

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Citations

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