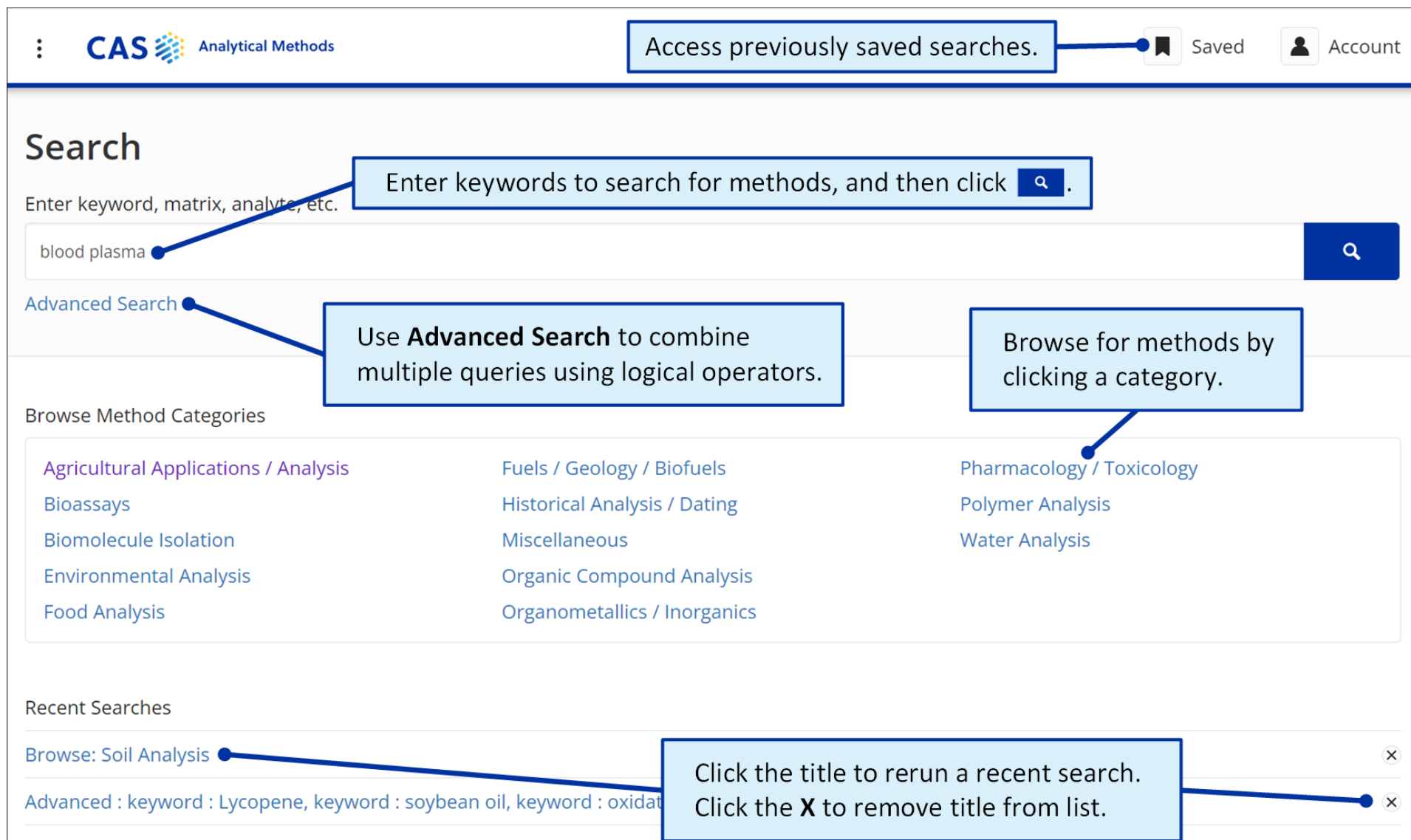


## Search



The screenshot displays the CAS Analytical Methods search interface. At the top, the header includes the CAS logo and 'Analytical Methods' on the left, and 'Access previously saved searches.' with a bookmark icon, 'Saved' with a bookmark icon, and 'Account' with a user icon on the right. The main section is titled 'Search' and contains a search bar with the placeholder text 'Enter keyword, matrix, analyte, etc.' and a search button. Below the search bar is an 'Advanced Search' link. To the right of the search bar is a callout box stating 'Enter keywords to search for methods, and then click [search button]'. Below the search bar is a list of 'Browse Method Categories' organized into three columns. A callout box points to the 'Advanced Search' link, stating 'Use **Advanced Search** to combine multiple queries using logical operators.' Another callout box points to the 'Pharmacology / Toxicology' category, stating 'Browse for methods by clicking a category.' At the bottom, there is a 'Recent Searches' section with two entries: 'Browse: Soil Analysis' and 'Advanced : keyword : Lycopene, keyword : soybean oil, keyword : oxidat'. A callout box points to the first entry, stating 'Click the title to rerun a recent search. Click the **X** to remove title from list.' The second entry also has an 'X' icon to its right.

CAS Analytical Methods

Access previously saved searches. Saved Account

### Search

Enter keyword, matrix, analyte, etc.

blood plasma

Advanced Search

Use **Advanced Search** to combine multiple queries using logical operators.

Browse for methods by clicking a category.

#### Browse Method Categories

Agricultural Applications / Analysis	Fuels / Geology / Biofuels	Pharmacology / Toxicology
Bioassays	Historical Analysis / Dating	Polymer Analysis
Biomolecule Isolation	Miscellaneous	Water Analysis
Environmental Analysis	Organic Compound Analysis	
Food Analysis	Organometallics / Inorganics	

#### Recent Searches

Browse: Soil Analysis	X
Advanced : keyword : Lycopene, keyword : soybean oil, keyword : oxidat	X

Click the title to rerun a recent search. Click the **X** to remove title from list.

## Advanced Search

Select the search field: Keyword, Analyte, Matrix, Method Category, Technique, CAS Method Number, or Publication Name.

Enter the query for the search field.

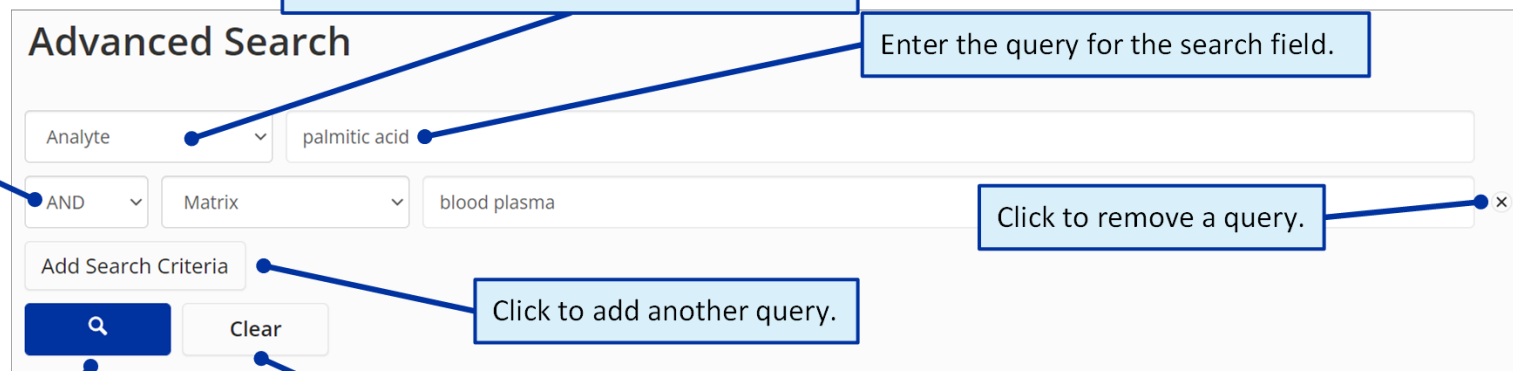
Select the logical operator: AND, OR, NOT.

Click to remove a query.

Click to add another query.

Click to execute search.

Click to reset form.



The screenshot shows the 'Advanced Search' form. It includes a dropdown menu for 'Analyte' with 'palmitic acid' entered, a dropdown for 'Matrix' with 'blood plasma' entered, and a logical operator dropdown set to 'AND'. Below these is an 'Add Search Criteria' button, a search button with a magnifying glass icon, and a 'Clear' button. A callout points to a small 'x' icon on the right side of the search criteria area, indicating a remove function.

## Results

The screenshot displays the 'Results' page for CAS Analytical Methods, showing a list of methods with various filters and action buttons. Callouts provide instructions on how to use these features:

- Select individual methods to export or save, or check box at top to select all methods on page.** (Points to the '2 selected' indicator and the top-left checkbox.)
- Save methods.** (Points to the 'Save' button.)
- Sort methods by Relevance or Publication Year.** (Points to the 'Sort Relevance' dropdown menu.)
- Download methods to PDF or XLS format.** (Points to the 'Download' button.)
- Click **Compare** to view selected methods for comparison.** (Points to the 'Compare (2/3)' button.)
- Click **Add to Compare** to select methods for comparison.** (Points to the 'Add to Compare' button.)
- Click method title or **View Details & Instructions** to view method details.** (Points to the 'View Details & Instructions' button for the first method.)
- Select boxes to filter methods by data values.** (Points to the filter checkboxes on the left sidebar.)
- Access full-text options.** (Points to the 'Full Text' dropdown menu.)
- View the source's **Reference Detail** page in CAS SciFinder-n.** (Points to the 'View in CAS SciFinder' button.)
- Remove a selected comparison method.** (Points to the 'Remove from Compare' button.)

The main content area shows two methods:

- Analysis of Hyperoside in Blood plasma by HPLC**  
CAS MN: 1-101-CAS-135904  
Analyte: Hyperoside  
Matrix: Blood plasma  
Other Materials: Reagent: Acetic acid; Methanol  
Technique: Liquid chromatographic UV detectors; HPLC; Extraction  
Equipment Used: High performance liquid chromatography system; Milli-Q Biocel Ultrapure Water System  
Source: LC determination and pharmacokinetic study of hyperoside in rat plasma after intravenous administration  
Liu, Xun; Wang, Dong; Wang, Si-Yuan; Meng, Xia Kang, Ting-Guo  
Yakugaku Zasshi (2010), 130 (6), 872-879. Pharm
- Analysis of Mexiletine in**  
CAS MN: 1-101-CAS-156566  
Analyte: Mexiletine  
Matrix: Urine; Blood plasma

## Method Detail

**Method Detail** (1 of 38)

Download method to PDF or XLS format.

Save method.

View structure image.

Scroll the display to see method details such as: Materials, Source, Equipment Used, Conditions, Instrument, Instructions, and Validation.

**Analysis of (±)-Pentobarbital in Blood plasma by Gas chromatography-mass spectrometry**

CAS MN: 1-101-CAS-168942

Method Category: Active Pharmaceutical Ingredient and Metabolite Analysis  
Technique: Gas chromatography-mass spectrometry

Materials	Role	Image	CAS RN
(±)-Pentobarbital	analyte	<a href="#">View Structure</a>	76-74-4
(±)-Thiopental	analyte	<a href="#">View Structure</a>	76-75-5
Propofol	analyte	<a href="#">View Structure</a>	2078-54-8
2,4,6(1 <i>H</i> ,3 <i>H</i> ,5 <i>H</i> )-Pyrimidinetrione, 1-methyl-5-(1-methyl-2-pentynyl)-5-(2-propenyl)-	analyte	<a href="#">View Structure</a>	151-83-7
Diazepam	analyte	<a href="#">View Structure</a>	89-14-5
Phenobarbital	analyte	<a href="#">View Structure</a>	50-06-6
Midazolam	analyte	<a href="#">View Structure</a>	43467-70-8
Nordiazepam	analyte	<a href="#">View Structure</a>	1088-11-5
Blood plasma	matrix		
GC capillary column (12 m x 0.2 mm ID, 330-nm film thickness)	material		

**Source**

Fast, Simple, and Validated Gas Chromatographic-Mass Spectrometric Assay for Quantification of Drugs Relevant to Diagnosis of Brain Death in Human Blood Plasma Samples

Peters, Frank T.; Jung, Julia; Kraemer, Thomas; Maurer, Hans H.

Therapeutic Drug Monitoring (2005), 27 (3), 334 - 344. Lippincott Williams & Wilkins

CODEN: TDMODV | ISSN: 01634356 | DOI: 10.1097/01.ftd.0000158079.53577.46

[Full Text](#) [View in CAS SciFinder®](#)

**Abstract** ^

In addition to total anamnesis, one of the important aspects in diagnosis of brain death is the exclusion of effective plasma concentrations of drugs that might mimic brain death. A min-concensus for toxicol. anal. in this context includes relevant analytes (thiopental, pentobarbital, methohexital,

## Compare Methods

Compare Methods

Click X to remove method from the table.

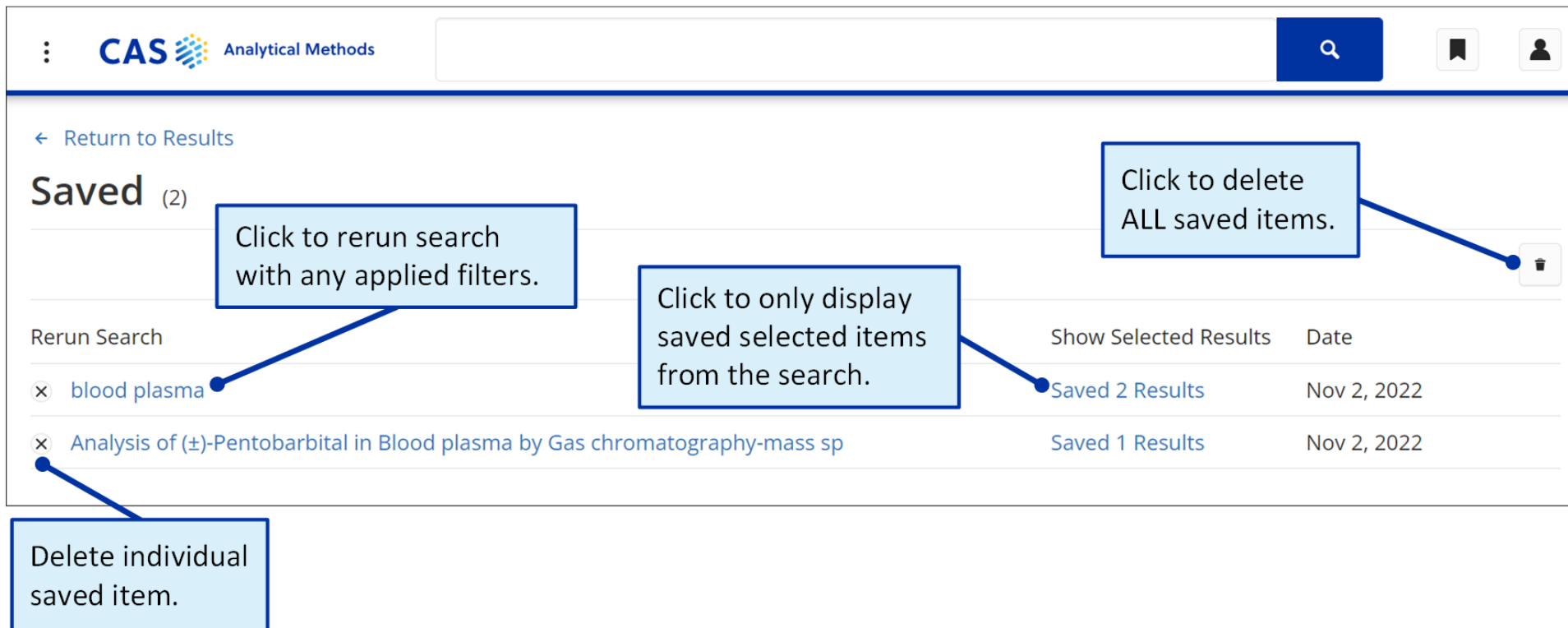
Download the comparison table.

Expand All data items on table or Collapse All.

Expand All Collapse All

	1	2	3
Title	Analysis of Hyperoside in Blood plasma by HPLC	Analysis of Carbamazepine in Blood plasma by HPLC	Analysis of 5-Fluorouracil in Blood plasma by Liquid-liquid extraction
CAS Method Number	1-101-CAS-135904	1-101-CAS-184445	1-101-CAS-158452
Method Category	Active Pharmaceutical Ingredient and Metabolite Analysis	Active Pharmaceutical Ingredient and Metabolite Analysis	Active Pharmaceutical Ingredient and Metabolite Analysis
Technique	Liquid chromatographic UV detectors; HPLC; Extraction	HPLC; Solid phase extraction	HPLC; Liquid-liquid extraction
Analyte	Hyperoside	<i>trans</i> -10,11-Dihydroxy-10,11-dihydrocarbamazepine; Carbamazepine 10,11-epoxide; <a href="#">View All</a>	Uracil; 5-Fluorouracil; Dihydrouracil; Antitumor agents
Matrix	Blood plasma	Blood plasma	Blood plasma
Other Materials	Acetic acid; Methanol; Analytical column (Diamonsil C18, 4.6 mm X 150 mm, i.d., 5 µm); Guard column (KR <a href="#">View All</a>	0.45 µm regenerated cellulose membrane filter; analytical column (250 mm x 4.6 mm; 5 µm); cartridges <a href="#">View All</a>	RP-18 X-Terra'column (5 µm particles, 25 cm)
Equipment Used	High performance liquid chromatography system, Shimadzu, Kyoto, Japan; Milli-Q Biocel Ultrapure <a href="#">View All</a>	HPLC system, 1200, Agilent Technologies, Wilmington, DE, USA; Vacuum Manifold, 12-port, Supelco, <a href="#">View All</a>	HPLC system, 1100, Agilent

## Saved Page



The screenshot shows the 'Saved' page in the CAS Analytical Methods interface. The page header includes the CAS logo and 'Analytical Methods' text, a search bar, and icons for a bookmark and user profile. Below the header, there is a 'Return to Results' link and a 'Saved (2)' section. The 'Saved' section contains a table with two rows of saved items. Callouts provide instructions for various actions: 'Click to rerun search with any applied filters.' points to the 'Rerun Search' link; 'Click to only display saved selected items from the search.' points to the 'Saved 2 Results' link; 'Click to delete ALL saved items.' points to the trash icon; and 'Delete individual saved item.' points to the delete icon next to the first item.

← Return to Results

**Saved** (2)

Click to rerun search with any applied filters.

Click to only display saved selected items from the search.

Click to delete ALL saved items.

Delete individual saved item.

Rerun Search	Show Selected Results	Date
<input type="checkbox"/> blood plasma	Saved 2 Results	Nov 2, 2022
<input type="checkbox"/> Analysis of (±)-Pentobarbital in Blood plasma by Gas chromatography-mass sp	Saved 1 Results	Nov 2, 2022