

For LabSolutions™ LCMS

Cell Culture Profiling Method Package for the LCMS-2050



Culture Media Components and Metabolites: Simultaneous Analysis of 85 Compounds in 17 Minutes

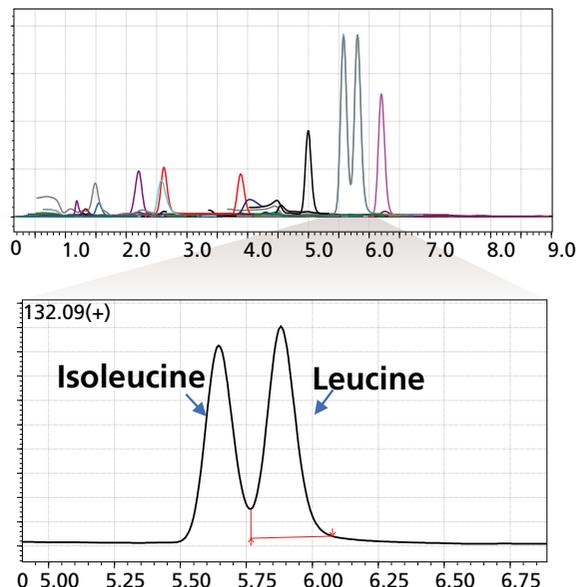
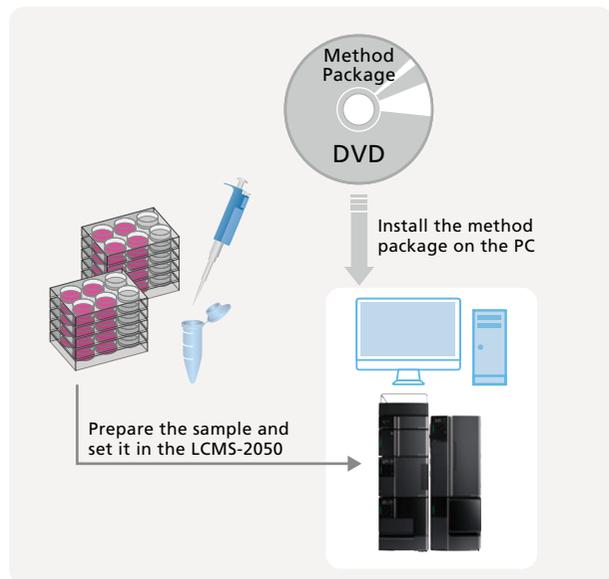
This package includes a preconfigured method covering vitamins, amino acids, and other culture media components and metabolites secreted by cells. The combination of this product and the LCMS-2050 enables simultaneous analysis of 85 compounds in 17 minutes without the need for complex method development. The culture media components and secreted metabolites can be visualized in a time series, which can be utilized in investigations into the optimization of cell culture conditions.

List of Registered Compounds

Amino Acids and Their Metabolites		Nucleic Acids and Their Metabolites	Vitamins
2-Isopropylmalic acid	Glycyl-glutamine	Adenosine	4-Aminobenzoic acid
10-Camphorsulfonic acid	Histidine	Adenosine monophosphate	Biotin
1-Methylhistidine	Homocystine	Cytidine	Choline
2-Aminobutyric acid	Isoleucine	Cytosine	Cyanocobalamin
2-Aminoethanol	Kynurenic acid	Deoxyadenosine	Folic acid
4-Hydroxyphenyllactic acid	Kynurenine	Guanine	Niacinamide
4-Hydroxyproline	Leucine	Guanosine	Nicotinic acid
5'-Methylthioadenosine	Lysine	Hypoxanthine	Pantothenic acid
5-Oxoproline	Methionine	Inosine	Pyridoxal
Acetylcarnitine	Methionine sulfoxide	Thymine	Pyridoxine
Alanine	Ophthalmic acid	Uracil	Riboflavin
Alanyl-glutamine	Ornithine	Uridine	
Anthranilic acid	Oxidized glutathione	Xanthine	
Arginine	Phenylalanine	Xanthosine	
Asparagine	Phenyllactic acid		
Aspartic acid	Proline		
Asymmetric dimethylarginine	Putrescine		
Carnitine	S-Adenosylhomocysteine		
Citrulline	Serine		
Creatine	Symmetric dimethylarginine		
Cysteine	Threonine		
Cystine	Tryptophan		
Glutamic acid	Tyrosine		
Glutamine	Urocanic acid		
Glutathione	Valine		
Glycine			
		Sugars	Others
		Hexose (Glucose)	Fumaric acid
		Sucrose	Glyceric acid
		Threonic acid	Lactic acid
			Malic acid
			Mevalonic acid
			Pyruvic acid
			Succinic acid
			Taurine

Ready-to-Use Method

This method package includes preconfigured analysis conditions required for analyzing culture media components and secreted metabolites. In addition, it can separate and analyze isomers such as leucine/isoleucine. The instruction manual includes sample pretreatment methods, allowing anyway to start analysis immediately.



Related Software

Multi-omics Analysis Package

With this package, the massive amounts of massive mass spectrometry data are displayed on a metabolic map, enabling statistical analyses such as PCA, hierarchical clustering, and box plots.

The software integrates seamlessly with various method packages for efficient data analysis.



Precautions

1. Requires LabSolutions LCMS Ver. 5.135 or later.
2. This method package is intended for research use only.

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LC/MS/MS Method Package for Cell Culture Profiling Ver. 3

Designed for triple quadrupole LC-MS systems, this method package enables comprehensive analysis of 144 components in culture media and intracellular metabolites in under 20 minutes. For applications requiring higher sensitivity and high-throughput multi-component analysis, we recommend pairing this product with our advanced triple quadrupole LC-MS system.



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