

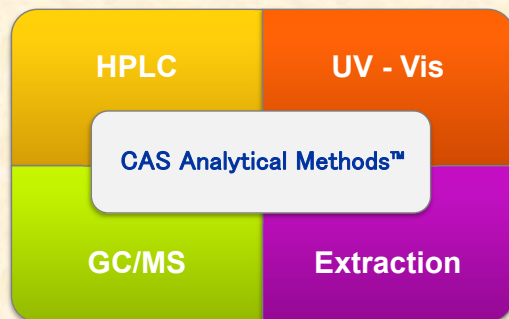
規格や基準法で定められていないような分析方法は、雑誌文献中に記載されている手法が貴重な情報源です。しかし、一般的な検索ツールで調査すると、ノイズも多く、目的とする分析情報にたどり着くには、相当の時間を要しておりました。



が分析方法の調査を変えます

CAS が保有する膨大な文献コレクションから、分析手法に特化した情報を抽出し、15万件以上の分析情報データを蓄積しています。各方法は表形式で表示して簡単に比較もできます。

HPLC, UV-Vis, GC/MS のデータや抽出方法など、物質のあらゆる分析法をカバーしております。



#### ◆ ユーザーの声



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**余計な文献を取り寄せる手間**や

**コストも削減**できました。



# Analytical Methods™

## 分析手法データベース



分析方法の調査にかかる  
時間を大幅短縮

# JAICI

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# 分析方法の調査にかかる時間を大幅短縮



## 簡単な操作で検索

**Search**

Enter keyword, matrix, analyte, etc.

**valsartan**

valsartan methyl ester

Browse Method Categories

- Agricultural Applications / Analysis
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- Historical Analysis / Dating
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Browse: Water / Wastewater / Sludge Analysis

**キーワードを入力**

- ✓ 分析対象、マトリックスなどの化学物質名称や CAS RN®
- ✓ 機器など分析手法に関するキーワード

**カテゴリーからの検索も可能**

## 多様な観点から絞り込み

**Results**

Analysis of Valsartan in Pharmaceutical tablets by Reversed-phase HPLC

CAS MN: 1-101-CAS-50901

**分析対象**

Matrix: Hydrochlorothiazide, Valsartan

Other Materials: Injector (20 µl fixed capacity); KR-5 C<sub>18</sub> column (250 mm × 4.6 mm, 5 µm); Cellulose acetate filter (0.45 µm); Membrane filter (0.2 µm)

Method: Active Pharmaceutical Ingredient and Metabolite Analysis

Equipment Used: HPLC system; Electronic weighing balance; Digital pH meter; Ultrasonicator

Source: Development of RP-HPLC method for estimation of valsartan and hydrochlorothiazide in tablets

Author: Vishal, M.; Shyamkumar, B.; Cyima, M.; Reema, N.

Journal: International Journal of Pharmaceutical Sciences and Nanotechnology (2013), 6 (4), 2240-2244. Pharma Book Syndicate

**分析技術**

Reversed-phase HPLC

**発行年**

2013

**分析に特化した項目で絞り込み**

**ヒットタームハイライト**

## 詳細な分析情報を収録

**Method Detail** (1 of 73)

**Analysis of Valsartan in Pharmaceutical tablets by Reversed-phase HPLC**

CAS MN: 1-101-CAS-50901

Method Category: Active Pharmaceutical Ingredient and Metabolite Analysis

Technique: Reversed-phase HPLC

**CAS 登録番号 (CAS RN®)**

**分析対象, マトリックスなど**

**文献情報**

**分析機器**

**分析条件**

**詳細な分析手法**

**分析に特化した情報を収録**

**詳細な分析手法, バリデーションデータも表示可能**

**バリデーションデータ**

**Linear Range**: 20 - 150 µg/mL Valsartan

**Limits of Detection**: 1.1 µg/mL Valsartan, 0.48 µg/mL Hydrochlorothiazide

**Limits of Quantitation**: 3.3 µg/mL Valsartan, 1.47 µg/mL Hydrochlorothiazide

**Accuracy**: 102.01% (0.74 SD), 101.09% (0.056 SD), 99.69% (0.060 SD) (Recovery) for 80, 100, 120% added respectively.

**Precision**: 0.8465% RSD (Intra day), 0.148% RSD (Inter day), Valsartan

**Retention Time**: 10.15 min, Valsartan, 3.78 min, Hydrochlorothiazide

## 複数情報の比較も簡単に

	1	2	3
Title	Analysis of Valsartan in Pharmaceutical tablets by Reversed-phase HPLC	Analysis of Valsartan in Pharmaceutical tablets by Reversed-phase HPLC	Analysis of Valsartan in Pharmaceutical tablets by Reversed-phase HPLC
CAS Method Number	1-101-CAS-50901	1-101-CAS-34874	1-101-CAS-61473
Method Category	Active Pharmaceutical Ingredient and Metabolite Analysis	Active Pharmaceutical Ingredient and Metabolite Analysis	Active Pharmaceutical Ingredient and Metabolite Analysis
Technique	Reversed-phase HPLC	Reversed-phase HPLC	Liquid chromatographic UV detector; Reversed-phase HPLC
Analyte	Hydrochlorothiazide, Valsartan	Valsartan	Valsartan
Matrix	Pharmaceutical tablets	Pharmaceutical tablets	Pharmaceutical tablets
Other Materials	Injector (20 µl fixed capacity); KR-5 C <sub>18</sub> column (250 mm × 4.6 mm, 5 µm); Cellulose acetate filter (0.45 µm); Membrane filter (0.2 µm)	Ultrapur Nsg Nylon 6.6 membrane sample filter paper; Inertsil ODS C-18 column; 250 × 4.6 mm internal	Acetonitrile; Triethylamine; Monopotassium phosphate; Phosphate Buffer; Phosphate buffer
Equipment Used	HPLC system, JASCO; Electronic weighing balance, Ohaus; Cizer; Digital pH meter, Analytical Lab	RP-HPLC, UV series, Shimadzu; Electronic balance, AX205, Shimadzu	HPLC, Waters; UV detector
Conditions	Chromatographic: Injection volume, 20 µl; Mobile phase, potassium dihydrogen phosphate (KH <sub>2</sub> PO <sub>4</sub> ) buffer (pH 3.7), 0.2% triethylamine and acetonitrile; Flow rate, 1 mL/min; Detection, 232 nm	Chromatographic: Isocratic elution with mobile phase (Methanol, water, THF 60:35:05 v/v/v) at a flow rate 1.0	Instrument: Detection-210 nm; Chromatographic: Mobile phase mixture of phosphate buffer and
Source	Development of RP-HPLC method for estimation of valsartan and hydrochlorothiazide in tablets	RP-HPLC method for the estimation of Valsartan in pharmaceutical dosage forms	Reversed phase HPLC analysis of Valsartan in pharmaceutical dosage forms
Preparation	Preparation of mobile phase 1. Prepare potassium dihydrogen phosphate (KH <sub>2</sub> PO <sub>4</sub> ) buffer (pH 3.7) with ortho-phosphoric acid.	Sample Preparation 1. Crush the formulation tablets of Valsartan in a mortar.	Preparation of pH 3.0 phosphate buffer 1. Weigh seven grams of KH <sub>2</sub> PO <sub>4</sub> into a 1000 mL beaker. Add deionized water to make 1000 mL.
Conditions	Chromatographic: Injection volume, 20 µl; Mobile phase, potassium dihydrogen phosphate (KH <sub>2</sub> PO <sub>4</sub> ) buffer (pH 3.7), 0.2% triethylamine and acetonitrile; Flow rate, 1 mL/min; Detection, 232 nm	Chromatographic: Isocratic elution with mobile phase (Methanol, water, THF 60:35:05 v/v/v) at a flow rate 1.0	Instrument: Detection-210 nm; Chromatographic: Mobile phase mixture of phosphate buffer and
Source	Development of RP-HPLC method for estimation of valsartan and hydrochlorothiazide in tablets	RP-HPLC method for the estimation of Valsartan in pharmaceutical dosage forms	Reversed phase HPLC analysis of Valsartan in pharmaceutical dosage forms
Preparation	Preparation of mobile phase 1. Prepare potassium dihydrogen phosphate (KH <sub>2</sub> PO <sub>4</sub> ) buffer (pH 3.7) with ortho-phosphoric acid.	Sample Preparation 1. Crush the formulation tablets of Valsartan in a mortar.	Preparation of pH 3.0 phosphate buffer 1. Weigh seven grams of KH <sub>2</sub> PO <sub>4</sub> into a 1000 mL beaker. Add deionized water to make 1000 mL.
Method	HPLC analysis 1. Perform the HPLC analysis using JASCO HPLC system consisting of pump (model Jasco Plus) with manual injector.	HPLC 1. Carry out the analysis of the mixture on Shimadzu LC10ADVP (model View All)	1. Inject sample solution onto Xentra C <sub>18</sub> column (100 × 4.6 mm I.D., 5 µm particle size) View All
Linearity Range	20 - 150 µg/mL Valsartan, 4 - 45 µg/mL Hydrochlorothiazide	10-35 ppm	5-25 µg/ml
Limits of Detection	1.1 µg/mL Valsartan, 0.48 µg/mL Hydrochlorothiazide	0.03 ppm	0.012 µg/ml
Limits of Quantitation	3.3 µg/mL Valsartan, 1.47 µg/mL Hydrochlorothiazide		
Accuracy	102.01% (0.74 SD), 101.09% (0.056 SD), 99.69% (0.060 SD) (Recovery) for 80, 100, 120% added respectively.		
Precision	0.8465% RSD (Intra day), 0.148% RSD (Inter day), Valsartan 1.50% RSD (Intra day), 0.843% RSD (Inter day), Hydrochlorothiazide		
Retention Time	10.15 min, Valsartan, 3.78 min, Hydrochlorothiazide	4.60 min	
Recovery			99.70% for 40 mg label claim

**項目別に表示**

**PDF や XLS 形式で保存可**

**文献 1**      **文献 2**      **文献 3**

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Development of RP-HPLC method for estimation of valsartan and hydrochlorothiazide in tablets

Source: International Journal of Pharmaceutical Sciences and Nanotechnology

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