

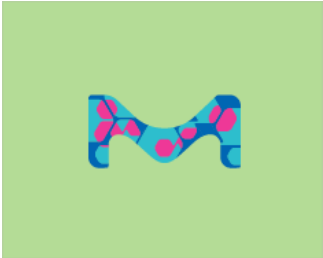


54273-U Supelco

Ascentis® Express C18, 2.7 Micron Capillary HPLC Column

2.7 µm particle size, L × I.D. 15 cm × 500 µm

eCl@ss 32110501



FDS Datasheet (PDF)

Similar Products

Conditionnement - SKUDisponibilité

Prix (EUR) Quantité

54273-U

Seulement 2 en stock (d'autres en cours d'arrivage) - A PARTIR DE

645.00

0

Commandes Bulk?

AJOUTER AU PANIER

Propriétés

Related Categories

Analytical/Chromatography, Ascentis Express C18, 2.7µm HPLC Columns, Ascentis Express Columns for Fast HPLC, C18, 2.7µm Capillary Columns, Capillary Dimensions, Plus...

feature	endcapped
parameter	60 °C temp. range
application(s)	HPLC: suitable
L × I.D.	15 cm × 500 µm
impurities	<5 ppm metals
matrix	Fused-Core particle platform
matrix active group	C18 (octadecyl) phase

[montrer plus \(13\)](#)

Description

Recommended products

Discover LiChropur reagents ideal for **HPLC** or **LC-MS** analysis

Legal Information

Ascentis is a registered trademark of Sigma-Aldrich Co. LLC

Informations Sécurité

RIDADR	NONH for all modes of transport
WGK Germany	3

Documents

Certificat d'Analyse

Entrez le Lot N°

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[FDS](#)

[Ascentis Express Nano/Capillary Column Care & Use Sheet \(107 KB\)](#)

Frequently Asked Questions

Which document(s) contains shelf-life or expiration date information for a given product?

If available for a given product, the recommended re-test date or the expiration date can be found on the Certificate of Analysis.

How do I get lot-specific information or a Certificate of Analysis?

The lot specific COA document can be found by entering the lot number above under the "Documents" section.



What is special about Ascentis Express?

Ascentis Express columns provide a breakthrough in HPLC performance. Based on Fused-Core particle technology, Ascentis Express provides the benefits of sub-2 µm particles but at much lower backpressure. These benefits include the capability of providing fast HPLC and higher resolution chromatography. The Fused-Core particle consists of a 1.7 µm solid core and a 0.5 µm porous shell. A major benefit of the Fused-Core particle is the small diffusion path (0.5 µm) compared to conventional fully porous particles. The shorter diffusion path reduces axial dispersion of solutes and minimizes peak broadening.

When are additional phases expected?

Additional phases are being developed. The best way to track new products is to visit [Ascentis Express](#) for the latest updates.

Can I use Ascentis Express on a UHPLC system?

Yes. Ascentis Express columns are packed in a way making them suitable for these ultra high pressure instruments. In fact, Ascentis Express outperforms sub-2 µm micron columns on many applications since Ascentis Express provides the benefits of sub-2 µm particles but at much lower back pressure. These benefits include the capability of providing fast HPLC and higher resolution chromatography. The Fused-Core particle consists of a 1.7 µm solid core and a 0.5 µm porous shell. A major benefit of the Fused-Core particle is the small diffusion path (0.5 µm) compared to conventional fully porous particles. The shorter diffusion path reduces axial dispersion of solutes and minimizes peak broadening.

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Protocoles et articles

Articles

[Ascentis Express UHPLC Columns with 2.0 µm Fused-Core Particles](#)

The new Supelco Ascentis® Express column line has been designed specifically for UHPLC instruments with 2.0 µm Fused-Core® silica, as diagrammed in Figure 1. Ascentis Express 2.0 µm UHPLC columns are...

Richard A. Henry, Gaurang Parmar

Reporter US, Volume 32.2

Keywords: High performance liquid chromatography, Mass spectrometry, Pharmaceutical, Separation

Related Content

[Selection Guide for Ascentis® Express HPLC Columns](#)

Ascentis Express C18 is the first choice for starting a new method. However, when a C18 doesn't give the desired separation or your sample contains compounds that are known to be difficult to retain ...

Keywords: High performance liquid chromatography, Separation, Supercritical fluid chromatography

[Supelco HPLC Calculator for Isocratic or Gradient Method Transfer](#)

Calculates conditions for transfer of an isocratic or gradient method from one HPLC column to another. Allows method scaling from microbore through preparative column range. Calculates time and solve...

Keywords: High performance liquid chromatography

Documentation référencée

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[read abstract](#)

Practical comparison of 2.7 microm fused-core silica particles and porous sub-2 microm particles for fast separations in pharmaceutical process development.

Ahmed Abraham et. al

Journal of pharmaceutical and biomedical analysis, 51(1), undefined (2009-9-18)

Fused-core silica stationary phases represent a key technological advancement in the arena of fast HPLC separations. These phases are made by fusing a 0.5 microm porous silica layer onto 1.7 microm nonporous silica cores. The reduced intra-particle f...[Read More](#)

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[Development of a new high-performance liquid chromatography method with diode array and electrospray ionization-mass spectrometry detection for the metabolite fingerprinting of bioactive compounds in Humulus lupulus L.](#)

Francesco Pio Prencipe et. al

Journal of chromatography. A, 1349, undefined (2014-5-27)

The study was aimed at developing a new analytical method for the metabolite fingerprinting of bioactive compounds in Humulus lupulus L. (hop), together with a simple extraction procedure. Different extraction techniques, including maceration, heat r...[Read More](#)

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[Development and validation of a novel stability-indicating HPLC method for the simultaneous assay of betamethasone-17-valerate, fusidic acid, potassium sorbate, methylparaben and propylparaben in a topical cream preparation.](#)

Jonathan Byrne et. al

Journal of pharmaceutical and biomedical analysis, 96, undefined (2014-4-16)

A novel stability-indicating reversed phase high performance liquid chromatographic (RP-HPLC) method for the simultaneous assay of betamethasone-17-valerate, fusidic acid and potassium sorbate as well as methyl- and propylparaben in a topical cream p...[Read More](#)

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[Development and validation of method for TH588 and TH287, potent MTH1 inhibitors and new anti-cancer agents, for pharmacokinetic studies in mice plasma.](#)

Aljona Saleh et. al

Journal of pharmaceutical and biomedical analysis, 104, undefined (2014-12-3)

MTH1 is a protein that is required for cancer cell survival and is overexpressed in cancer cells. TH588 and TH287 are two new compounds that inhibit the MTH1 protein. The inhibitors were tested in pharmacokinetic studies on mice. A bioanalytical meth...[Read More](#)

[read abstract](#)

[Absolute protein quantification of clinically relevant cytochrome P450 enzymes and UDP-glucuronosyltransferases by mass spectrometry-based targeted proteomics.](#)

C Gröer et. al

Journal of pharmaceutical and biomedical analysis, 100, undefined (2014-9-15)

Cytochrome P450 (CYP) enzymes and UDP-glucuronosyltransferases (UGT) are major determinants in the pharmacokinetics of most drugs on the market. To investigate their impact on intestinal and hepatic drug metabolism, we developed and validated quantif...[Read More](#)

[read abstract](#)

[Development and validation of LC methods for the separation of misoprostol related substances and diastereoisomers.](#)

Getu Kahsay et. al

Journal of pharmaceutical and biomedical analysis, 111, undefined (2015-4-17)

Misoprostol is a synthetic prostaglandin E1 analogue which is mainly used for prevention and treatment of gastric ulcers, but also for abortion due to its labour inducing effect. Misoprostol exists as a mixture of diastereoisomers (1:1) and has sever...[Read More](#)

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[An on-line SPE-HPLC method for effective sample preconcentration and determination of fenoxycarb and cis, trans-permethrin in surface waters.](#)

Dalibor Satinský et. al

Talanta, 142, undefined (2015-5-25)

A new on-line SPE-HPLC method using fused-core columns for on-line solid phase extraction and large volume sample injection for increasing the sensitivity of detection was developed for the determination of insecticides fenoxycarb and cis-, trans-per...[Read More](#)

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[Development of a rapid and sensitive method for the determination of aluminum by reverse-phase high-performance liquid chromatography using a fluorescence detector.](#)

Heena et. al

Journal of chromatographic science, 53(5), undefined (2014-10-18)

This study represents a new analytical high-performance liquid chromatography-fluorescence detector method for the determination of Al(III) as Al(III) complex with 8-hydroxyquinoline-5-sulfonic acid in a tap water sample and a coke sample. A micellar...[Read More](#)

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[Development and Validation of an LC-MS-MS Method for Determination of Simvastatin and Simvastatin Acid in Human Plasma: Application to a Pharmacokinetic Study.](#)

Pankaj Partani et. al

Journal of chromatographic science, 54(8), undefined (2016-5-27)

A liquid chromatography-tandem mass spectrometry method was developed and validated for the simultaneous determination of simvastatin (SV) and simvastatin acid (SVA) in human plasma. To improve assay sensitivity and achieve simultaneous analysis, SVA...[Read More](#)

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[Development of a new extraction technique and HPLC method for the analysis of non-psychoactive cannabinoids in fibre-type Cannabis sativa L. \(hemp\).](#)

Virginia Brighenti et. al

Journal of pharmaceutical and biomedical analysis, 143, undefined (2017-6-14)

The present work was aimed at the development and validation of a new, efficient and reliable technique for the analysis of the main non-psychoactive cannabinoids in fibre-type Cannabis sativa L. (hemp) inflorescences belonging to different varieties...[Read More](#)

[read abstract](#)

[Bioequivalence and pharmacokinetic study of febuxostat in human plasma by using LC-MS/MS with liquid liquid extraction method.](#)

Babu Rao Chandu et. al

SpringerPlus, 2(1), undefined (2013-6-7)

A bioequivalence study was proved of generic Febuxostat 80 mg tablets (T) in healthy volunteers. For this purpose, Authors developed a simple, sensitive, selective, rapid, rugged and reproducible liquid chromatography-tandem mass spectrometry method f...[Read More](#)

[read abstract](#)

[A new method based on supercritical fluid extraction for polyacetylenes and polyenes from Echinacea pallida \(Nutt.\) Nutt. roots.](#)

Massimo Tacchini et. al

Journal of pharmaceutical and biomedical analysis, 146, undefined (2017-8-26)

The genus Echinacea (Asteraceae) includes species traditionally used in phytotherapy. Among them, Echinacea pallida (Nutt.) Nutt. root extracts are characterized by a representative antiproliferative activity, due to the presence of acetylenic compou...[Read More](#)

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[Determination of tropane alkaloids atropine and scopolamine by liquid chromatography-mass spectrometry in plant organs of Datura species.](#)

Silvia Jakabová et. al

Journal of chromatography. A, 1232, undefined (2012-3-7)

Hyoscyamine (atropine) and scopolamine are the predominant tropane alkaloids in the Datura genus, occurring in all plant organs. The assessment of the alkaloid content of various plant parts is essential from the viewpoint of medical use, but also as...[Read More](#)

[read abstract](#)

[Comparison between evaporative light scattering detection and charged aerosol detection for the analysis of saikosaponins.](#)

Han Young Eom et. al

Journal of chromatography. A, 1217(26), undefined (2010-5-11)

Saikosaponins are triterpene saponins derived from the roots of Bupleurum falcatum L. (Umbelliferae), which has been traditionally used to treat fever, inflammation, liver diseases, and nephritis. It is difficult to analyze saikosaponins using HPLC-U...[Read More](#)

[read abstract](#)

[Determination of thymopentin in beagle dog blood by liquid chromatography with tandem mass spectrometry and its application to a preclinical pharmacokinetic study.](#)

Meiyun Shi et. al

Journal of separation science, 38(8), undefined (2015-1-30)

The pentapeptide thymopentin (Arg-Lys-Asp-Val-Tyr, RKDYY) corresponds to amino acids 32-36 of the 49 amino acid immunomodulatory polypeptide, thymopoeitin, whose biological activity is partially reproduced. Thymopentin is widely used in the clinic an...[Read More](#)

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