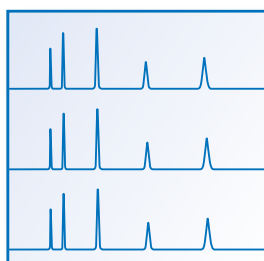
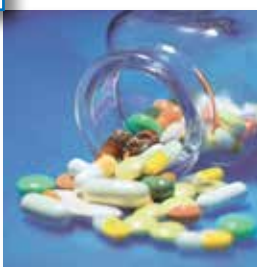


GENERAL  
CATALOGUE  
2017/2018



RP  
NP  
HILIC



CHIRAL  
SFC  
BIO-LC



(U)HPLC  
Micro-LC  
HPLC

# Worldwide Availability

If any of your requirements for selecting a chromatography vendor are not addressed in this general catalogue, please contact "your" YMC office below or a local authorised distributor (refer to [www.ymc.de](http://www.ymc.de)). You will find that YMC is always highly responsive to customer requirements, and feedback is guaranteed.

**YMC CO., LTD.**

YMC Karasuma-Gojo Bld. 284 Daigo-cho,  
Karasuma Nisiiru Gojo-dori Shimogyo-ku,  
Kyoto 600-8106 Japan  
TEL. +81(0)75-342-4515, FAX +81(0)75-342-4550  
[www.ymc.co.jp](http://www.ymc.co.jp)

**YMC Europe GmbH**

Schöttmannshof 19  
D-46539 Dinslaken  
Germany  
TEL. +49(0)2064/427-0, FAX +49(0)2064/427-222  
[www.ymc.de](http://www.ymc.de)

**YMC America, Inc.**

941 Marcon Boulevard Suite 201  
Allentown, PA18109 USA  
TEL. +1-610-266-8650, FAX +1-610-266-8652  
[www.ymcamerica.com](http://www.ymcamerica.com)

**YMC India Ltd.**

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District Centre Mayur Vihar Phase-I New Dehli-110091  
India  
TEL. +91-11-45041601, FAX +91-11-45041901  
[www.ymcindia.com](http://www.ymcindia.com)

**YMC Korea Co., Ltd.**

310 Woolim W-City, 618 Sampyeong-dong,  
Bundang-gu, Sungnam-si, Gyeonggi-do  
463-400 Korea  
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[www.ymckorea.com](http://www.ymckorea.com)

**YMC Co., Ltd. Shanghai Rep. Office**

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TEL: +86-21-6235-1388, FAX: +86-21-6235-1398  
[www.ymcchina.com](http://www.ymcchina.com)

**YMC Taiwan Co., Ltd.**

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Songshan Dist., Taipei City 105,  
Taiwan (R.O.C.)  
TEL. +886-3-2150-630, FAX +886-3-2150-286  
[www.ymctaiwan.com](http://www.ymctaiwan.com)

**YMC Singapore Tradelinks Pte. Ltd.**

6 Indus Road, #13-09 Emerald Park, Tower 1,  
Singapore 169588  
TEL.+65-9023-7617  
[www.ymc.sg](http://www.ymc.sg)

# What's new?



## Method Development and Validation Kits

- chiral and achiral kits
- documentation of robustness & reproducibility
- very attractive pricing

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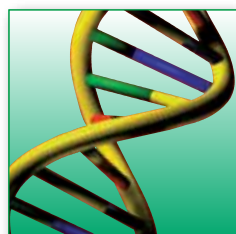


## Versatile (U)HPLC Columns with 6 Modifications: YMC-Triart

- robustness
- pH stability (1-12)
- steric recognition

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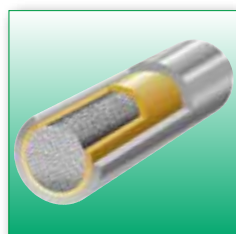


## UHPLC SEC Columns: YMC-Pack Diol 2 µm

- excellent reproducibility
- improved resolution
- long-term stability

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## Metal-free Hardware for Biochromatography

- for analysis of coordinating compounds
- high pressure tolerance
- PEEK-lined stainless steel

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## Coated and Immobilised Polysaccharides: CHIRAL ART

- NP/RP / SFC & SMB
- analytical to preparative LC/SFC
- extremely attractive pricing

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## Supercritical Fluid Chromatography Columns: Alcyon SFC

- solvent consumption reduced
- fast separation with high resolution
- chiral and achiral stationary phases

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## Preparative & Process LC

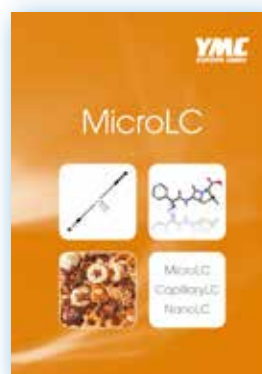
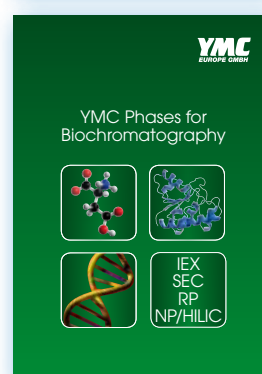
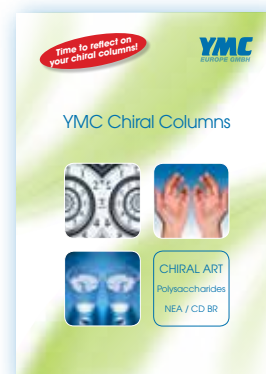
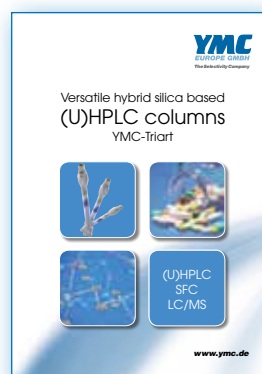
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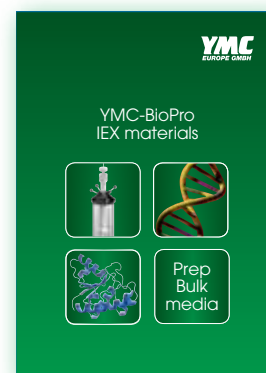
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## Literature available (Selection)

### Analytical



### Preparative



Also available: Posters, Product Information, Technical Guide Lines, Manuals, DMF / RSF / CoA, etc.



[Kinka|ku-ji] *japanese*

Kinkaku-ji (Temple of the Golden Pavilion), also known as Rokuon-ji (Deer Garden Temple), is a Zen Buddhist temple in Kyoto, Japan. The garden complex is an excellent example of Muromachi period garden design. The Muromachi period is considered to be a classical age of Japanese garden design. The correlation between buildings and its settings were greatly emphasized during this period. It was a way to integrate the structure within the landscape in an artistic way. The garden designs were characterized by a reduction in scale, a more central purpose, and a distinct setting. A minimalistic approach was brought to the garden design, by recreating larger landscapes in a smaller scale around a structure. It is designated as a National Special Historic Site and a National Special Landscape, and it is one of 17 locations comprising the Historic Monuments of Ancient Kyoto World Heritage Site. It is also one of the most popular buildings in Japan, attracting a large number of visitors annually.

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# Company Profile

YMC is a leading specialist supplier of high performance products for liquid chromatography, with headquarters in Kyoto, Japan, and with subsidiaries in Europe with qualified/authorized distributors, the USA, India, China, Korea, Taiwan and Singapore.

Our mission statement is our ambition to provide chromatographic solutions for any compound from its discovery through scale-up into production and its ultimate quality control in the laboratory. YMC can always be expected to provide meaningful support, chromatographic tools and assistance for routine R&D, fast LC/UHPLC, high-throughput screening, LC-MS, automation or process-scale engineering.



YMC Co., Ltd. manufacturing facility in Komatsu, Japan

YMC Europe GmbH, Dinslaken, Germany



As a leading global supplier of high performance products for liquid chromatography, YMC is always striving to be highly innovative. The most recent and interesting premium products from YMC include:

## **pH and temperature stable (U)HPLC columns and bulk phases: YMC-Triart**

Applications using 100% aqueous solvents as well as the separation of similar substances are possible. This allows the whole range of substance polarity to be analysed. Full scalability ensures up- and down-scaling from UHPLC ↔ HPLC ↔ prep scale. Now available in 6 different selectivities for analytical applications.

Bulk media in 10, 15, or 20  $\mu\text{m}$  makes YMC-Triart support available in large quantities for process separations.

## **Coated and immobilised polysaccharides: CHIRAL ART Polysaccharides**

For use in normal phase, reversed phase, polar organic and SFC modes with remarkable stability. Available in prepacked columns with 3 or 5  $\mu\text{m}$  particles as well as in multi-kilogram bulk scale materials with 10 or 20  $\mu\text{m}$  particles at extremely attractive, competitive prices.

## **YMC Nano/MicroLC columns**

Highly efficient separations using small sample sizes and low flow rates with Nano- or MicroLC/MS systems with high sensitivity are now possible with YMC capillary columns. Available packed with every YMC reversed phase, normal phase /HILIC stationary phase in very robust column hardware. The choice of standard 1/16 inch or 1/32 inch fittings allows these columns to be used in all Nano- or MicroLC systems.

However, it is not only product specification that demonstrates YMC qualities, but also the perceived ethical values of having expert people contribute competent and consistent performance along with exceptional reliability even for the most difficult and demanding separations. YMC strive to exceed expectations, worldwide and with guaranteed long-term supply.



# Company Profile



Facilities include preparative HPLC, fraction concentration equipment, crystallisation, vacuum filtration, vacuum drying, freeze drying, all supported by state-of-the-art analytical instrumentation. YMC workshops are available with a well-defined balance of theory and practical work at either novice or advanced levels, all of which can be customised to individual requirements.

Hands-on support services are offered by Komatsu/Japan, Dinslaken/Germany, San Diego/California/USA and Noida/India: local application laboratories and the Komatsu factory provide method development, optimisation and scale-up as well as custom synthesis and toll manufacturing (GMP-compliant) from milligram to ton scale.



## Supply

Extensive local inventory and highly competent order processing staff ensure speedy product supply to virtually any destination. In addition, authorized YMC International Distributors are encouraged to maintain local inventory, too, occasionally complemented by consignment products provided by YMC, so that lead times are brought down to a minimum.

# The ideal laboratory resource: [www.ymc.de](http://www.ymc.de)

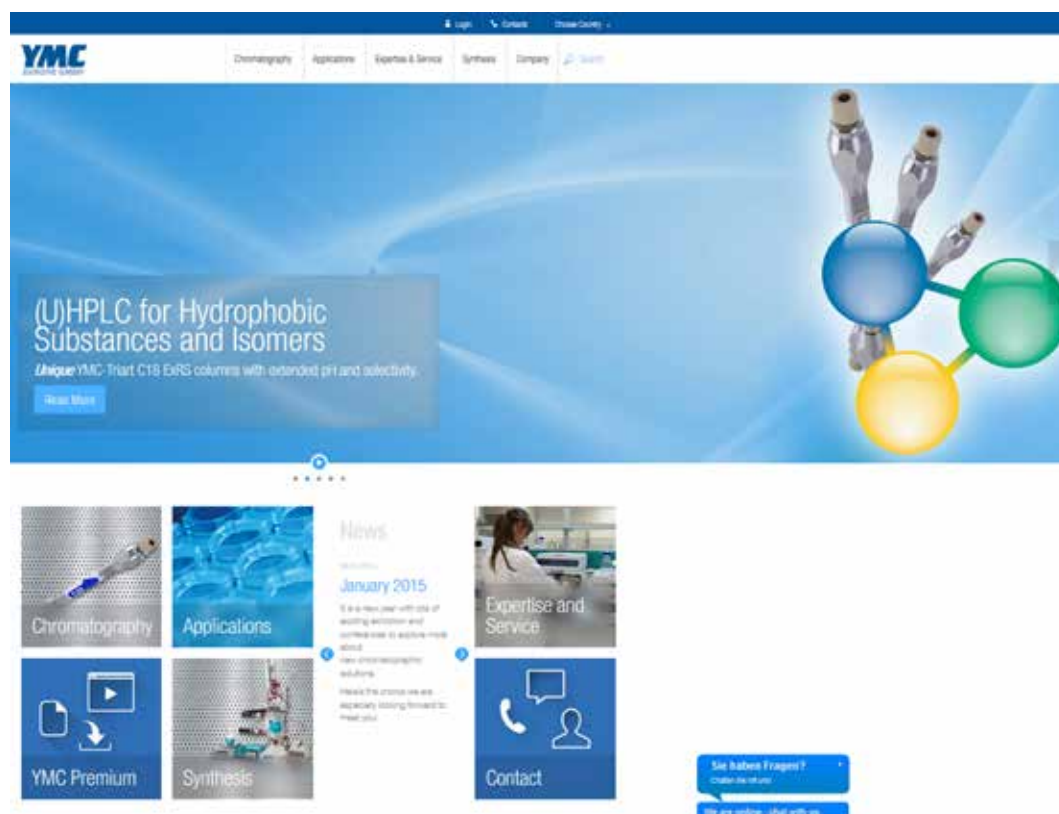
- more than 750 pages full of professional information
- extensive applications database
- extensive number of documents available for downloading
- support services including regulatory compliance information

YMC Europe's website is a powerful tool for chromatography application support and product knowledge for the pharmaceutical, chemical, biochemical, environmental, food and beverage industries.

## Chromatography:

The full spectrum of YMC's products for micro/nano LC, (U)HPLC, analytical LC and preparative separations:

- RP, IEX, SEC, HILIC, NP and SFC columns
- UHPLC and HPLC products
- Capillary columns to fit the majority of nano/microLC systems
- YMC-Triart Prep bulk: the bulk media with enhanced pH stability available in industrial scale quantities
- CHIRAL ART: coated/immobilised cost-efficient YMC chiral bulk media and HPLC columns\*
- Column technologies: laboratory and pilot scale glass columns, DAC prep/pilot steel columns



\* Prep 10  $\mu$ m or 20  $\mu$ m freely available

# The ideal laboratory resource: [www.ymc.de](http://www.ymc.de)

## Applications:

Free access to YMC's own application database: with over 2,500 different compounds in more than 750 state-of-the-art applications!

## Expertise and Service:

Overview on all the support YMC can provide, e.g.:

- Method development and (chiral) phase screening services to support you with the selection of the most appropriate YMC column and/or method conditions.
- Custom purifications from laboratory to pilot or process scale performed in Dinslaken, Germany or Komatsu, Japan.
- Troubleshooting support for most common questions.

## YMC Premium:

Download section exclusively for registered members. Here you can find all downloadable documents, which are only accessible after login, e.g. in-depth product information, price lists, regulatory support documentation etc.

## Contact:

All possible contact details including direct contact numbers, call-back service, phone numbers and email addresses.

In addition, you can find the direct contact details for your product specialist on each of the corresponding product pages.

We are online - chat with us

ONLINE

Start Chat

Welcome to our Online Support! To help us serve you better, please provide some information before initiating the chat with a representative.

Name:

Email:

Company:

Question:

Department:

Start Chat Send Message

Options LiveZilla Live Help

## Direct Answers to Your Questions!

Please contact YMC via our (free) online chat for immediate answers to technical or commercial issues or to arrange for personal discussions at your site; YMC specialists are available to respond to your questions and issues on [www.ymc.de](http://www.ymc.de)!



To find out more please visit our website at [www.ymc.de](http://www.ymc.de) and see what extra value YMC Europe can offer you at no extra cost!



# Method Validation Kits by YMC

- three analytical columns from specified lots
- validation kit 1: consists of two columns from one lot and one column from a second lot
- validation kit 2: consists of three columns from three different lots
- for documentation of robustness and reproducibility

Due to different approaches to validation, YMC offers two different versions of validation column kits.

## Validation kit 1:

contains two columns from a single bonding batch and one column from a different bonding batch. Each column comes with its own test chromatogram. The two matched columns are used to confirm that characteristics unique to a single column, such as artefacts due to the column packing process are not affecting your results. The third column is used to assess whether batch-to-batch variations of a bonded phase affect your method. This is a test of the robustness of the method and provides assurance that the method will give reliable results over the life of your product.



## Validation kit 2:

contains three analytical columns packed with stationary phases from three different batches, in order to solely test the robustness of the particular method.

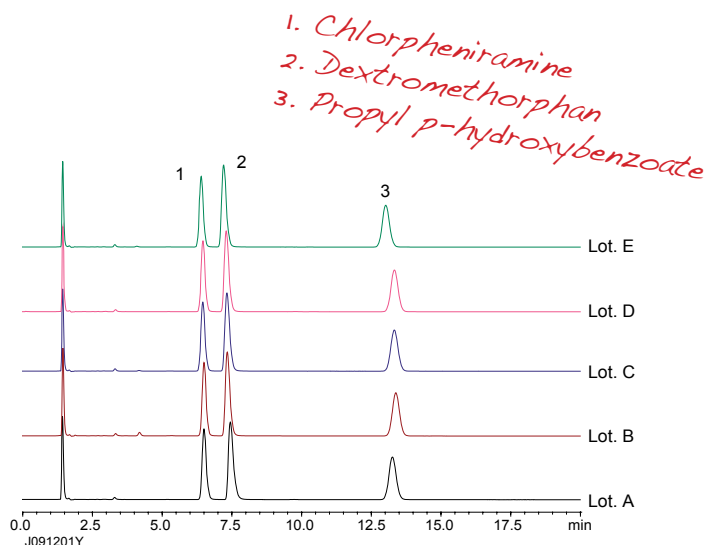
## Batch Reservation Service

Occasionally, a critical analytical method will not prove as robust as you would prefer. Columns from a particular media batch may be the only way that you can, for example, isolate a critical process impurity. In such cases, YMC will reserve a specific batch of material for the use of an individual customer. YMC will also reserve prepacked columns for release according to a pre-arranged schedule. Call YMC or contact your YMC representative for details.

## Available dimensions:

Length: 30 or 33, 50, 75, 100, 150 mm

ID: 2 or 2.1, 3, 4, 4.6, 6 mm



## Validation kit 1 (consists of two columns from one batch and one column from a second batch):

To order a validation kit 1 simply use the ordering number for the column of interest, e.g. **TO12SP9-10Q1PT** and add **V1: TO12SP9-10Q1PTV1**.

## Validation kit 2 (consists of three columns from three different batches):

To order a validation kit 2 simply use the ordering number for the column of interest, e.g. **TA12SP9-05Q1PT** and add **V2: TA12SP9-05Q1PTV2**.

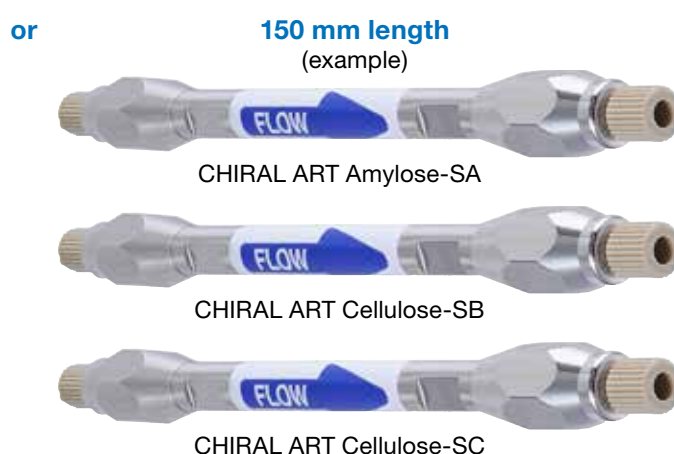
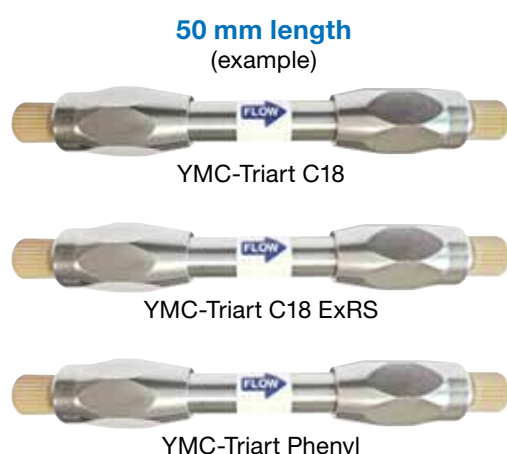
For details on YMC selectivities and the International Product Code please refer to the specific product sections in this catalogue.

# Achiral/Chiral Method Development Kits by YMC

- available with YMC-Triart, YMC-Pack *Pro* and CHIRAL ART columns
- selection of 3 column chemistries
- choice of 3 different column dimensions
- very attractive pricing

In order to offer a convenient solution for method developers, YMC is now offering different price attractive Method Development Kits for both achiral and chiral separations.

The Method Development Kits will be available with a selection of 3 different YMC-Triart (U)HPLC columns, YMC-Pack Pro Family columns or CHIRAL ART columns.



## Available dimensions

Length: 50, 150 mm, ID: 2.0 or 2.1, 4.6 mm

## Achiral Kits Available

Product Family	Modifications	Particle Size	Dimensions	Part No.
YMC-Triart	C18 / C18 ExRS / Phenyl	1.9 μm	50 x 2.1 mm ID	TATARTPHSP9-05Q1PT
	C18 / C8 / Phenyl			TATOTPHSP9-05Q1PT
	C18 / PFP / Diol-HILIC			TATPFTDHSP9-05Q1PT
	C18 / C18 ExRS / Phenyl	3 μm		TATARTPHS03-05Q1PTH
	C18 / C8 / Phenyl			TATOTPHS03-05Q1PTH
	C18 / PFP / Diol-HILIC			TATPFTDHS03-05Q1PTH
ProFamily	C18 / Hydrosphere C18 / C18 RS	3 μm	50 x 2.0 mm ID	ASHSRSS03-0502WT

## Chiral Kits Available

Product Family	Modifications	Particle Size	Dimensions	Part No.
CHIRAL ART	Amylose-SA Cellulose-SB Cellulose-SC	3 $\mu$ m	50 x 4.6 mm ID	KSAKSBKSCS03-0546WT
	Amylose-C Cellulose-C Cellulose-SC			KANKCNKSCS03-0546WT
	Amylose-SA Cellulose-SB Cellulose-SC		150 x 4.6 mm ID	KSAKSBKSCS03-1546WT
	Amylose-C Cellulose-C Cellulose-SC			KANKCNKSCS03-1546WT