

# Chiral ION-QN & Chiral ION-QD

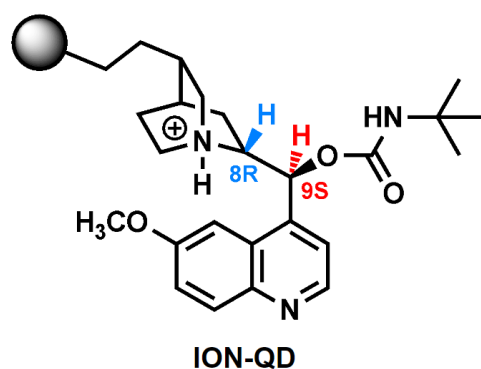
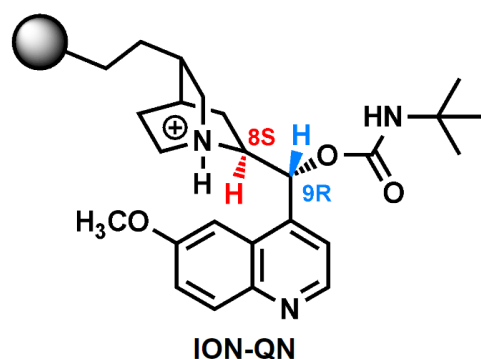
Weak Anion-Exchanger (WAX) stationary phases for reliable chiral separation of organic acids and amino acids

## Product Overview

Galochrom introduces own generic series of weak anion-exchangers, based on *tert*-butyl-carbamoylated *Cinchona* alkaloids quinine (QN) and quinidine (QD).

The pseudoenantiomeric nature of the utilized chiral units (QN/QD pair) facilitates outstanding separation of acidic racemates while allowing for the reversal elution order of enantiomers between the two columns.

**These columns represent the most efficient approach to purify and resolve even the most challenging mixtures.**



## Applications

Chiral ION-QN, Chiral ION-QD are ideal for enantioseparations of chiral acidic compounds, including:

- *N*-protected amino acids
- Aminophosphonic & Aminosulfonic acids
- Lactic & Thiolactic acids
- Clenbuterol & Thyroxine

## Key Benefits

Provide better separation power and increased enantioselectivity (in comparison to commercially available alternatives)

- Allow elegant switch of the elution order of enantiomers
- Demonstrate high-stability against all common HPLC solvents
- Enable enhanced method development
- Available at analytical and preparative scale

## Features

<b>Max. Pressure</b>	4350 psi (300bar)
<b>Particle Size</b>	3 μm*
<b>pH range</b>	2 to 8
<b>Pore Size</b>	200 Å
<b>Surface Area</b>	220 m <sup>2</sup> /g

<b>Max. Temperature</b>	60 °C
<b>Packing Material</b>	Spherical, Fully Porous
<b>Carbon Load</b>	13.0 %
<b>Endcapped</b>	Yes
<b>Product Line</b>	ION

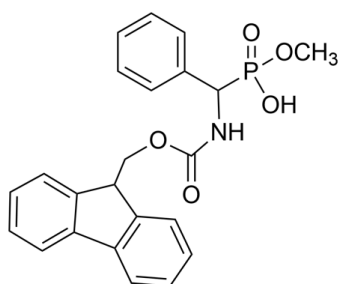
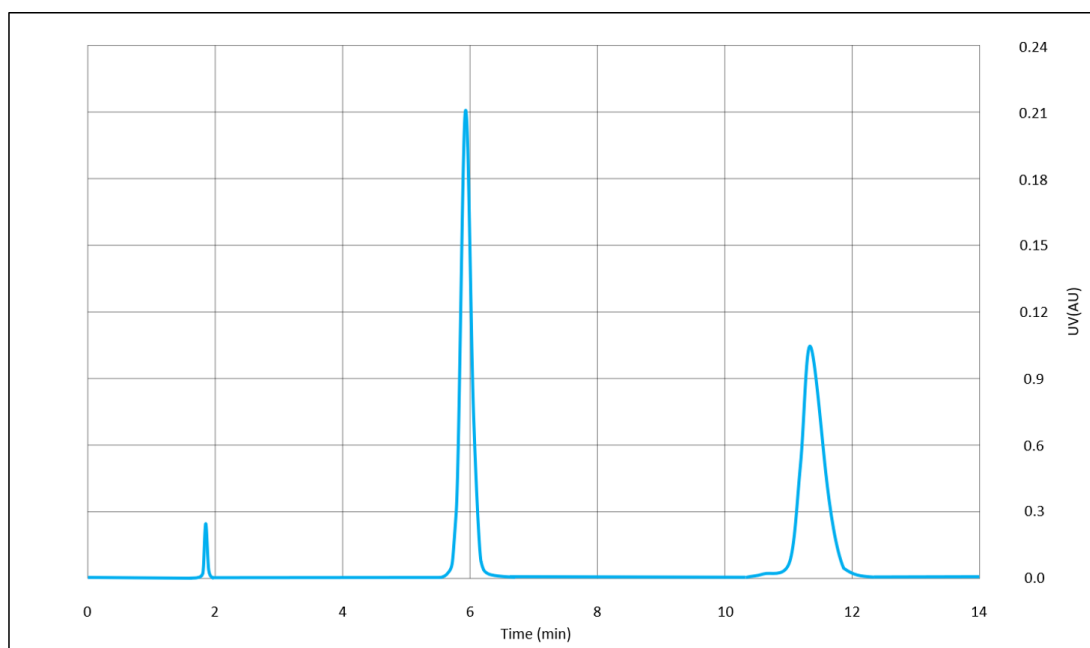
\*Preparative columns contain 5 μm particles with 120 Å pores.

Moreover, you can order custom column dimensions as well as preferred particle size.

# Applications

## Chiral ION-QD

Analytical separation of racemic aminophosphonic acids



<b>Column</b>	Chiral ION-QD
<b>Dimensions</b>	150 mm x 4 mm, 5.0 $\mu$ m
<b>Mobile phase</b>	MeOH:AcOH:AA 98:2:0.5 (v/v/w)
<b>Flow rate</b>	1 mL/min
<b>Temperature</b>	25 °C
<b>Detection</b>	UV @254 nm

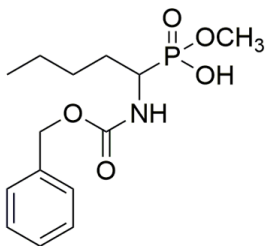
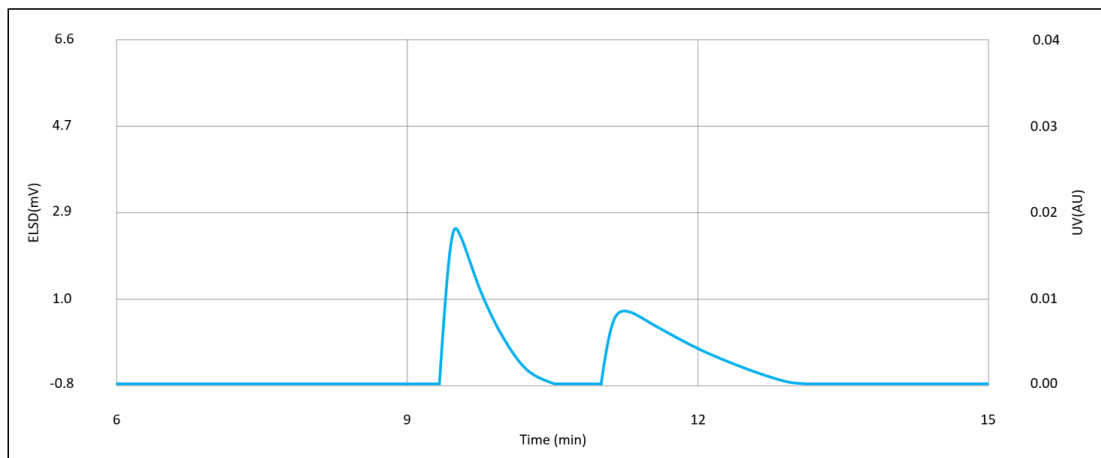
# Applications

## Chiral ION-QD

Chiral ION-QD and Chiral ION-QN represent an elegant solution for enantiomeric resolution of chiral acidic compounds including, but not limited to:

- *N*-protected amino acids
- Aminophosphonic & Aminosulfonic acids
- Lactic & Thiolactic acids
- Clenbuterol & Thyroxine

### Preparative separation of racemic aminophosphonic acids [ 100 mg ]



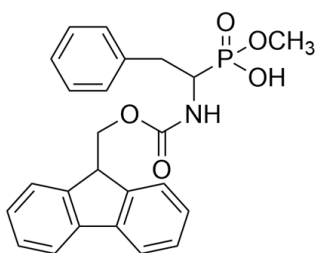
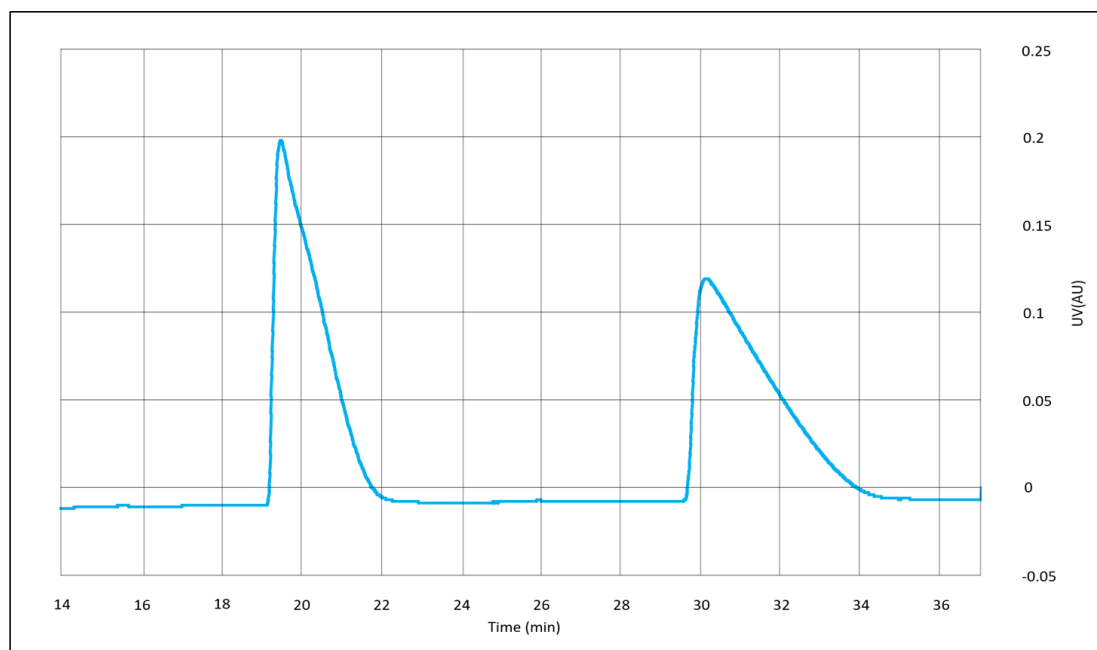
<b>Column</b>	Chiral ION-QD
<b>Dimensions</b>	250 mm x 20 mm, 5.0 μm
<b>Mobile phase</b>	MeOH:FA:AF 100:2:0.5 (v/v/w)
<b>Flow rate</b>	20 mL/min
<b>Temperature</b>	20 °C
<b>Detection</b>	UV @254 nm

Aminophosphonic acids are important precursors for synthesis of phosphopeptidomimetics, which represent an attractive new generation of peptide surrogate pharmaceuticals.

# Applications

## Chiral ION-QN

Preparative separation of racemic aminophosphonic acids [ 50 mg ]

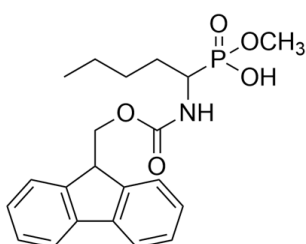
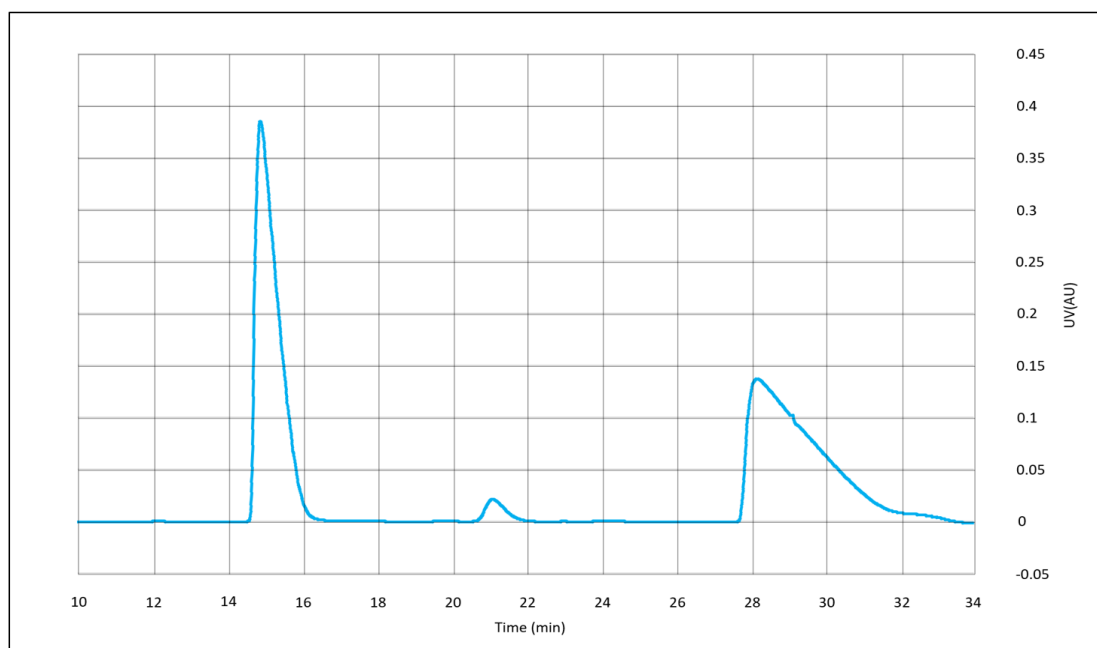


<b>Column</b>	Chiral ION-QN
<b>Dimensions</b>	250 mm x 20 mm, 5.0 $\mu$ m
<b>Mobile phase</b>	MeOH:FA:HCOONH <sub>4</sub> 99:1:0.5 (v/v/w)
<b>Flow rate</b>	15 mL/min
<b>Temperature</b>	25 °C
<b>Detection</b>	UV @254 nm

# Applications

## Chiral ION-QN

Preparative separation of racemic aminophosphonic acids [ 50 mg ]

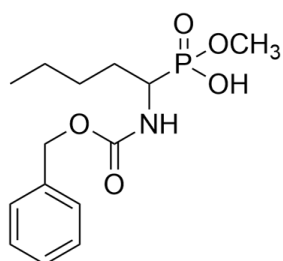
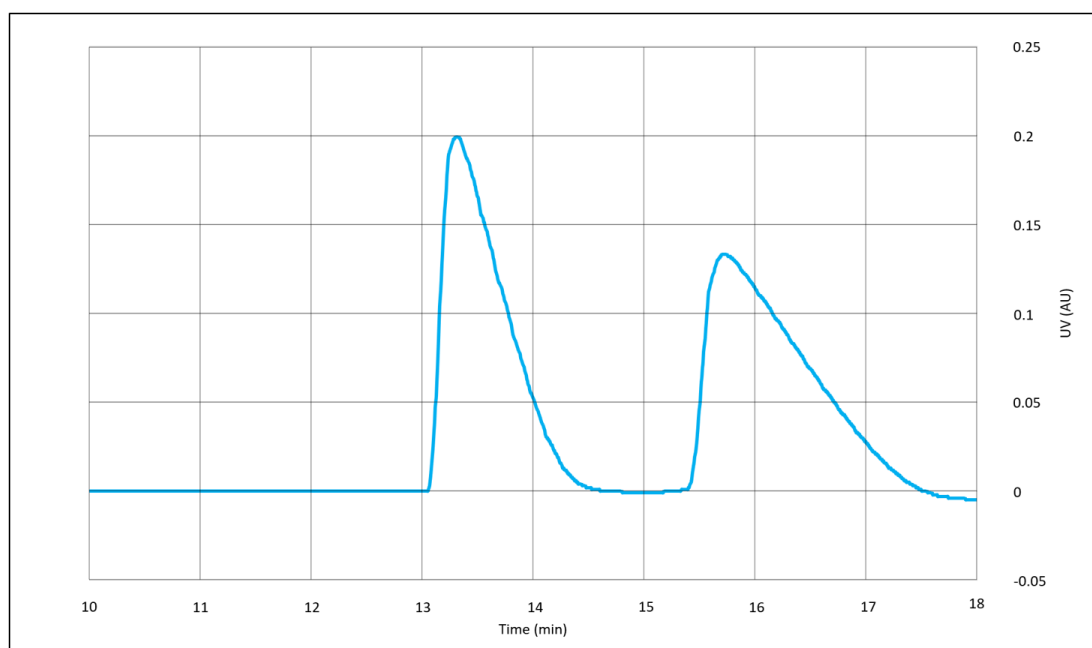


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<b>Flow rate</b>	15 mL/min
<b>Temperature</b>	25 °C
<b>Detection</b>	UV @220 nm