

# ChiroSolve Products and Services Catalog

## International Prices

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**Notices and Disclaimer: These products are for RESEARCH USE ONLY.** The products are research tools and services that enable tremendous efficiency in chiral separation processes. However, since the results are totally dependent on the properties and nature of the sample racemate being used, ChiroSolve does not guarantee that the researcher will always achieve target enantiomeric enrichment for the sample racemate.

Kits will be shipped through preferred shippers (FEDEX, UPS or DHL). Customer is responsible for all the local and international shipping and tariff charges. Payment terms: net 30 days.

## ChiroSolve Kits

### Screen: Kits to identify chiral separation conditions

ChiroSolve's comprehensive Screen kit set delivers 384 combinations of 32 resolving agents and 12 solvents to find effective and efficient separation criteria to use for method development or isolating target enantiomers. The 384 unique separating conditions are **delivered as 4 plates** each with 96 different conditions. An experiment will employ either acid or base kits included to enable identification of criteria to use for isolating target enantiomers within 24 hours (actual hands-on work: 1 hour).

#### Standard Kits

Catalog Number	Kit set*	Racemate State	Racemate pH	International Price
CS-A-05004-P	Comprehensive screen (384 unique conditions)	Liquid or Solid	Base	€2,800
CS-B-05004-P	Comprehensive screen (384 unique conditions)	Liquid or Solid	Acid	€2,800
CS-A-05002-STRG	Strongly acid kits for weak base racemate (192 unique conditions)	Liquid or Solid	Base	€1,600

\* Requires a total 12 mmol of racemate (3 mmol per plate). Resultant crystals can be observed with naked eye.

#### Reduced Volume Kits

Catalog Number	Kit set*	Racemate State	Racemate pH	International Price
CS-A-05004-G	Comprehensive screen: reduced volume kits with glass vials	Liquid or Solid	Base	€2,800
CS-B-05004-G	Comprehensive screen: reduced volume kits with glass vials	Liquid or Solid	Acid	€2,800
CS-A-05004-GSTRG	Strongly acid kits for weak base racemate (192 unique conditions)	Liquid or Solid	Base	€1,600

\* Requires a total 2 mmol of racemate (0.5 mmol per plate). Must use HPLC for identification and analysis of crystals.

### ChiroSolve Inc.

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## EnantioPrep – Kits for Enantiomer Isolation (used by medicinal chemists)

Note: This product will be available in August, 2011

EnantioPrep is used to deliver purified enantiomer ready for evaluating drug candidates for efficacy and safety. The steps in the EnantioPrep process are screening of racemate to determine suitable separation parameters, recovery of the racemate for re-use, and isolation of the target enantiomer (both +ve and –ve) through iterative crystallization. The EnantioPrep package includes ChiroSolve Screen kits along with Purification components.

Catalog Number	Kit set	Racemate State	Racemate pH	International Price
CS-A-08004-EP	Complete EnantioPrep kit	Liquid, or Solid	Base	€3,200
CS-B-08004-EP	Complete EnantioPrep kit	Liquid or Solid	Acid	€3,200

## ScalePrep - Customized Kits for Method Optimization (used by process chemists)

Note: This product will be available in January, 2011

The chiral separation method developed using the EnantioPrep process can be optimized for scale-up to kilo lab and manufacturing operations. This method optimization requires determination of the optimum:

- ratio between racemate and resolving agent
- concentration of solvent (or combination of solvents)

The steps in the ScalePrep process are 1.) screen the sample racemate using ChiroSolve Screen to determine which combinations of resolving agents and solvents are candidates for scale-up and then 2.) test the purification process of the best 2-3 combinations of resolving agents and solvents using ChiroSolve Purify and 3.) use ChiroSolve Optimize to find optimum separation conditions and processes. Optimize kits contain quantities and concentrations of resolving agent(s) and solvent(s) of the customer's choice. With the complete ScalePrep kit crystallization can be repeated to identify the conditions that optimize the yield at the desired purity. Please contact us for a quotation specific to your application.

Catalog Number	Kit set	Racemate State	Racemate pH	International Price
CS-A-09001-SP	Complete ScalePrep kit	Liquid or Solid	Base	Custom
CS-B-09001-SP	Complete ScalePrep kit	Liquid or Solid	Acid	Custom

## ChiroSolve Services

### Screening Service

Screening Services provide a means for customers to outsource screening operations attaining precise results quickly.

- Screening the racemate against a set of 384 conditions (4 kits) to maximize the opportunities for crystallization and identify efficient screening parameters to optimize enantiomer recovery. Customers receive the vials with crystals and the racemate that is recovered from the remaining vials (in which crystals did not form). This service does not include analysis of the crystals.
- Duration of 3 days for standard service

Note: Add €1,000/- if you require polarimetric readings for +ve results

Catalog Number	Service per racemate	Racemate pH	International Price
CS-SVC-01-SCR	Screening Service for acid or base racemate (no analysis)	Acid or Base	€5,000
CS-SVC-02-SCR	Screening Service for neutral racemate (racemate will be derivatised to acid or base state)	Neutral	€6,000

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## EnantioPrep Service

EnantioPrep Services delivers customer isolated enantiomers in quantities up to 30% of the racemate provided.

- Includes above screening service
- Recovers the racemate used during screening
- Uses the recovered racemate to isolate the purified enantiomer target using optimum conditions identified during screening. This is done through series of iterative crystallization steps until target purity or highest purity is achieved
- Up to 5 gm of pure enantiomer will be delivered
- Duration: 2 weeks

Catalog Number	Service per racemate		Racemate pH	International Price
CS-SVC-01-EP	EnantioPrep Service (per enantiomer)		Acid, Base Neutral	€9,000 €10,000

## ScalePrep Service

This is a follow-up service after EnantioPrep Service which delivers an optimized chiral separation method that can be scaled up for kilo labs and for manufacturing. For each selected reagent/solvent combination (that offers separation):

- Identifies what ratio between the racemate and resolving agent maximizes the results
- Identifies the concentration of the chosen solvent (or mixture of solvents) that should be used to achieve the end-point for enantiomer recovery
- Identifies the energy saving factors during scale-up process
- Duration: 1 week per reagent/solvent combination to be explored

Catalog Number	Service per racemate		Racemate pH	International Price
CS-SVC-01-SP	ScalePrep Service		Acid, Base or Neutral	€10,000 to €15,000

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