

Synthra MChelate (Catalog No. 013)

Synthra MChelate is a completely automated synthesis system for routine production of [^{68}Ga], [^{90}Y], [^{177}Lu] and [^{89}Zr] labeled peptides. With the easy-to-use configuration software SynthraView it's simple to automate the synthesis. The Synthra MChelate module offers both, fully automatic and manual modes of operation.

Labeling Possibilities

Peptide application: DOTATOC or DOTATATE can be labeled by heating 50 nmol of peptide at pH 3.5 - 4.2 for 5 min at 95 °C. For purification, the reaction mixture is passed over a C-18 cartridge to avoid any potential metal breakthrough.

- **[^{68}Ga] Labeling:** The automated synthesis takes about 20 minutes with a decay-corrected yield of about 50%.
- **[^{177}Lu] Labelling:** The automated synthesis takes about 15 minutes with a decay-corrected yield of >70%.

[^{89}Zr] application: Monoclonal antibodies (mAbs) conjugated with DFO can be labeled fully automated at room temperature in 60 min. The reaction mixture can be purified and desalted using a PD-10 SEC column. The automated synthesis takes about 80 minutes with isolated yield of >70%.

General Features

- ✓ **Heating and Cooling Capabilities**
 - 1 heating zone with cooling capabilities
 - Temperature range: RT – 200 °C
- ✓ **Detectors and Controllers**
 - 2 shielded radiation detectors
 - 1 Pressure sensor
- ✓ Build-in **vacuum pump** (<250 mbar)
- ✓ **Dispensers and Valves**
 - HR-dispenser (up to 50.000 steps, 2.5/5 mL)
 - Chemically inert valves with small dead volume < 35 μL , 5 bar rated

Synthesis Features

- ✓ **6 reagent vials**
 - Four small (1 – 3 mL) and two large (10 – 15 mL) volume glass vials for reagents



- ✓ **2 cartridge holders**
- ✓ **SPE unit** for final product formulation
- ✓ **Synthesis Options:**
 - ➔ Product vial heater option (Catalog No. 000ph)
 - ➔ [^{18}F] option (Catalog No. 013f) with [^{18}O]water recovery system

GMP Features

- ✓ Synthesis files for various radiotracers
- ✓ **GMP compliant.** Electronic control and data collection (27/18 channels)
- ✓ **21CFRpart11** & **LIMS** compatible

Terminal Control

- ✓ **A Laptop (Win 10 Pro) and SynthraView are included**

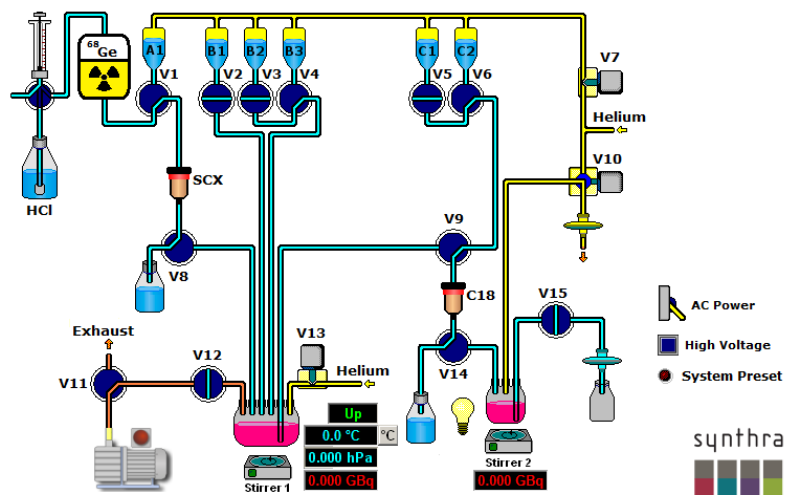
Synthra Various Radiosynthesizers

Product Description and Technical Specifications

synthra



MChelate



Example of the Graphical User Interface (GUI) of the SynthraView software for the synthesis of a [⁶⁸Ga] tracer