

Synthra C11 Acetate (Catalog No. 011)

The Synthra C11 Acetate module is a completely automated radiosynthesizer for the efficient production of [^{11}C]Acetate. Automating the synthesis is simple, with the easy-to-use configuration software SynthraView. The Synthra C11 Acetate module offers both, fully automatic as well as manual modes of operation.

Gas Phase Capabilities

- ✓ High specific activities are achieved from in-target produced [^{11}C]CO₂ ranging from 1 Ci/ μmol to 10 Ci/ μmol .*

The target [^{11}C]CO₂ is trapped in a stainless steel tube at -180 °C or on molecular sieve. It is then transferred into the reaction loop oven containing CH₃MgBr or CH₃MgCl with a Helium flow of 10 mL/min. [^{11}C]acetate is generated by carboxylation of these Grignard reagents in the loop oven, successively hydrolyzed and purified by SPE cartridges.

[^{11}C]Labeling Possibilities

- ✓ **[^{11}C]Acetate Production:** [^{11}C]Acetate is ready for release after only 12 min starting from trapping the [^{11}C]CO₂. The yield is better than 50%.

General Features

- ✓ **Heating and Cooling Capabilities**
 - 2 heating zones with cooling capabilities
 - Temperature range: -196 °C – 200 °C
- ✓ **Detectors and Controllers**
 - 4 shielded radiation detectors
 - 2 electronic flow controllers
 - 1 filter test unit
- ✓ **Chemically inert valves** with small dead volume < 35 μL , 5 bar rated

Synthesis Features

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



- ✓ **2 Cartridge holders**
- ✓ **SPE Unit** for final product formulation
- ✓ **Further Option:**
 - ➔ Product vial heater option (Catalog No. 000ph)

GMP Features

- ✓ Synthesis files for [^{11}C]Acetate
- ✓ **GMP compliant.** Electronic control and data collection (27/18 channels)
- ✓ **21CFRpart11** & **LIMS** compatible

Terminal Control

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

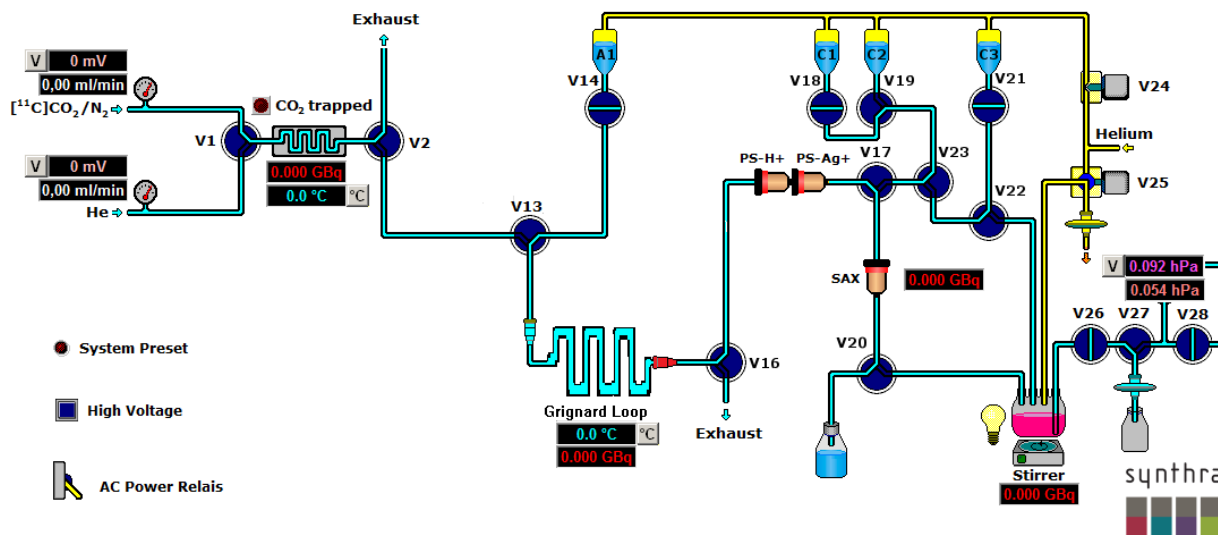
Synthra C-11 Family

Product Description and Technical Specifications

synthra



[¹¹C] Acetate



The Graphical User Interface (GUI) of the SynthraView software