



Spirit of Innovation

Apex 396



Automated Multiple Peptide Synthesizer



aappTec

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Automated Multiple Peptide Synthesizer

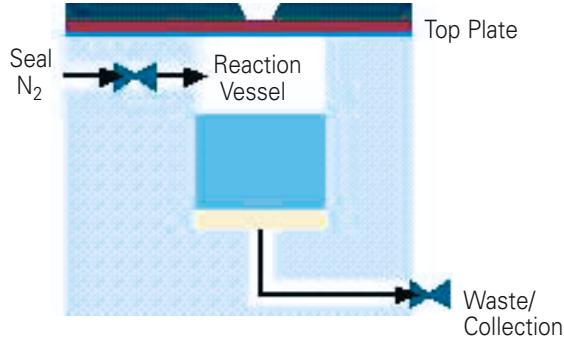
The Apex 396 is the established market leader in multiple and single peptide synthesizers. This instrument is ideal for producing peptide and protein fragments, alanine scans, epitope mapping and peptide parallel libraries. Synthesis scales range from 15 mg up to 2 grams.

QUALITY

- Due to the unique design of the Teflon® reactor block, the resin stays at the bottom of the reactor, allowing it to stay in full contact with the reaction solution. Because of this, the resin does not stick to the sides of the reactor, thus resulting in higher yields of complete peptides with fewer deletion impurities.
- The nitrogen-assisted bottom filtration quickly and thoroughly empties the reactor while maintaining an inert atmosphere, resulting in quick emptying. This process, in combination with fast delivery, minimizes the decomposition of the peptide resin due to extended contact with acid or base and allows quick, thorough and efficient washing of the resin to prevent impurities due to carryover.
- These features make the Apex 396 the obvious choice for automated ambient temperature parallel synthesis of peptides.

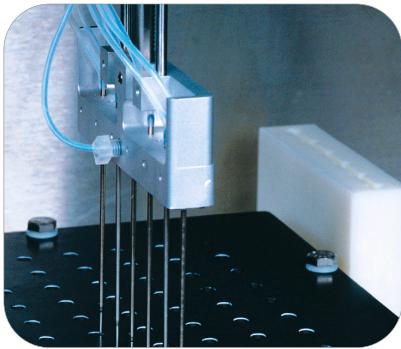


A fully enclosed work area contains and controls fumes and any unpleasant odors.

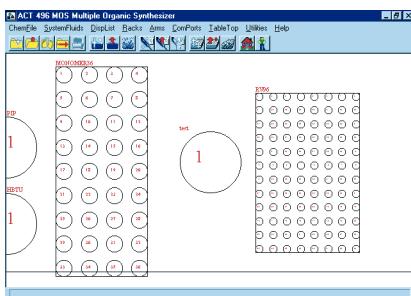


FLEXIBILITY

- The Apex 396 has the flexibility and capacity to produce a single peptide, a few peptides or up to 96 peptides simultaneously.
- The dual robotic arms accurately and precisely transfer reagents between any two points on the worktable.



- The flexibility of the indexed tabletop allows for any shape, size or placement of containers.
- The Apex 396 is flexible enough for any type of chemistry, including preactivation of amino acids.



- The Apex 396 is adaptable for the use of different reactor sizes.
- The easy-to-use Windows® software enables the chemist to readily develop protocols for most any type of chemistry or to use standard protocols, such as Fmoc- or Boc- as standard on the Apex 396.
- Options in reactor style and configuration, the size and number of monomer vials in the monomer rack, and the size and number of reagent containers provide additional flexibility.

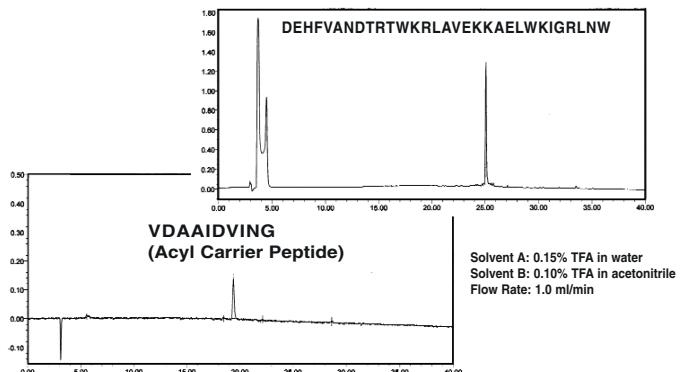
MIXING

- Gentle but efficient vortex mixing thoroughly mixes resin and reagents while preserving the integrity of the resin beads.
- Vortex mixing provides highly consistent and sustainable reactions and ensures consistent and reliable production of high quality peptides and proteins.



CONVENIENCE

- Automatic cleavage of final peptide products into vials or micro titer plates
- The speed and flexibility of the robotic arms, combined with the indexed tabletop, allow for development of innovative new methodologies.
- The multiprobe fast delivery system dramatically reduces the time required for dispensing reagents or solvents to the entire reactor. As a result, the time the resin is in contact with reactants is similar between the first well and the 96th well, which produces uniform results across the entire reactor. For example, the six probes can wash an entire 96-well reactor within a minute.
- Using the six-diluter option, unique volumes of up to six different reagents can be accurately and precisely transferred simultaneously, with transfer to all wells of the 96-well reactor taking only about 2 - 3 minutes.
- Reactors are available in two styles: Classic and Ares™.
- Classic reactor blocks perform reactions at ambient temperature under inert atmosphere. The reactor remains sealed at all times to maintain continuous inert atmosphere throughout the entire synthesis sequence.
- In the Ares™ reactor block, each well is sealed and completely isolated to prevent any possibility of



cross-contamination. In specially equipped Ares™ 396 synthesizers, the reactor block can heat reactions above the boiling point of the solvent without significant loss of solvent.

- All reactor blocks are formed from chemically resistant Teflon®, and each style reactor features nitrogen-assisted bottom filtration to quickly and thoroughly empty the reactor while maintaining an inert atmosphere.
- The flexible Windows®-based software does not require knowledge of peptide chemistry. The user can select standard protocols, such as Fmoc- or Boc-, or can develop custom protocols. Simply click on the reactants, reagents and cycles to be added to the synthesis matrix, and the software makes all of the assignments. The software also saves set-up time by automatically calculating the amounts of solvents and reagents required.

