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## Universal CPG type II, 1000A

http://www.lumiprobe.com/p/universal-cpg-type-2-unylinker

The Universal CPG type II, 1000A is one of universal supports used to immobilize nucleosides for synthesizing oligonucleotides and to increase rate of dephosphorylation of the 3' end oligonucleotide during deblocking.

For the cleavage from the support and oligonucleotide deprotection anhydrous ammonia gas-phase, ammonium hydroxide/methylamine mixture and other basic reagents can be used in a short time. The Universal CPG type II, 1000A is suitable for use in harsh conditions and makes cleavage and deprotection faster compared to universal supports. Pore size of 1000 Å is recommended for the synthesis of oligonucleotides up to 120 bases. For shorter oligos universal support 500 Å can be used.

# **Usage**

Coupling: Standard conditions for universal CPG.

Deprotection: 2 hours at 80 °C or 8 hours at 55 °C using concentrated ammonia; 15 minutes at 65 °C using AMA mixture, ammonium hydroxide - 40% methylamine (1:1).

#### Structure of Universal CPG type II, 1000A

#### **General properties**

Appearance: white powder

Quality control: loading measurement, functional testing in oligo synthesis.

Storage conditions: 24 months after receival at  $-20^{\circ}$ C in the dark. Transportation: at room temperature for up to 3

weeks. Desiccate.

### Oligo synthesis details

Pore size, Å: 1000 Typical loading, umol/g: 40–60

Coupling conditions: standard coupling, identical to normal nucleobases

Cleavage conditions: ammonium hydroxide 2 hours at 80 °C or AMA mixture, ammonium hydroxide - 40% methylamine

(1:1), 15 minutes at 65 °C

Deprotection conditions: identical to protected nucleobases