

## Universal CPG type II, 1000A

<http://www.lumiprobe.com/p/universal-cpg-type-2-ynylinker>

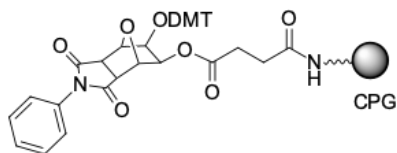
The Universal CPG type II, 1000A is one of universal supports used to immobilize nucleosides for synthesizing oligonucleotides and to increase rate of dephosphorylation of the 3' end oligonucleotide during deblocking.

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 receipt at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate. |

### Oligo synthesis details

|                          |                                                                                                                     |
|--------------------------|---------------------------------------------------------------------------------------------------------------------|
| Pore size, Å:            | 1000                                                                                                                |
| Typical loading, µmol/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                                                                                  |