

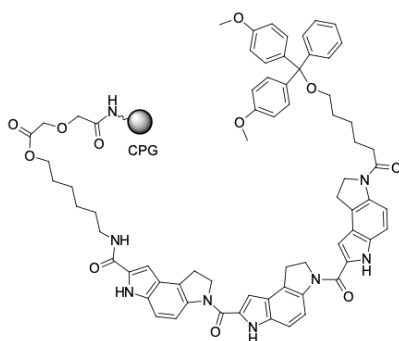
## MGB CPG 1000

<http://www.lumiprobe.com/p/mgb-cpg-1000>

Dihydropyrroloindole carboxylate (DPI) represents the class minor groove binders (MGB) compounds capable of site-specifically incorporation into the DNA minor groove.

MGB controlled pore glass (CPG) is used as a support for the direct synthesis of oligonucleotides bearing pyrrole subunits arranged along an artificial peptide backbone useful for efficient nucleic acid duplex stabilizing due to higher melting temperatures ( $T_m$ ) mediated base-stacking interactions in MGB probes.

Designs of oligonucleotides with MGB moiety at the 3'-terminus can be used for hybridization-based assays utilizing stable complexes formed by oligonucleotides with the complementary sequences, e.g., DNA probes in quantitative PCR-based assays.



**Structure of MGB CPG 1000**

### General properties

Appearance:	off white beads
Quality control:	functional testing
Storage conditions:	24 months after receipt at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate.
Legal statement:	This Product is offered and sold for research purposes only. It has not been tested for safety and efficacy in food, drug, medical device, cosmetic, commercial or any other use. Supply does not express or imply authorization to use for any other purpose, including, without limitation, in vitro diagnostic purposes, in the manufacture of food or pharmaceutical products, in medical devices or in cosmetic products.

### Oligo synthesis details

Pore size, Å:	1000
Typical loading, $\mu\text{mol/g}$ :	>15
Deprotection conditions:	Oxidation: preferably 0.5 M CSO in acetonitrile (3 min), when using iodine, iodination products are formed. Deblocking: standard conditions using CSO as oxidizer, $\text{NH}_4\text{OH}/\text{EtOH}$ 3:1 (v/v) 24 hours at 55 °C using iodine oxidizer.