

**CDPI3-CPG [Minor Groove Binder CPG]
*500A***Catalog number: 6900
Unit size: 100 mg**Product Details**

Storage Conditions	Freeze (<-15 °C), Minimize light exposure
Expiration Date	12 months upon receiving

Chemical Properties

Appearance	Solid
Soluble In	MeCN

Applications

Minor Groove Binder (MGB) molecules selectively bind to the minor groove of a DNA molecule, the shallow furrow in the DNA helix. MGB-labeled oligonucleotides form stable hybrid complexes with complementary DNA and RNA target sequences. Dihydropyrroloindole tripeptide (CDPI3), the analogs of natural product CC-1065, have been shown to arrest sequence-specific primer extension on single-stranded DNA when linked to oligonucleotides. CDPI3-containing oligonucleotides increases both the specificity and the strength of hybridization, thus enhancing the stability of DNA duplexes. The addition of MGB molecules to DNA probes allows the design of shorter hybridization probes useful for molecular diagnostics, e.g., quantitative PCR based assays. Several designs are possible, including Taqman MGB probes. AAT Bioquest offer this CPG support for conveniently adding an MGB moiety to the 3'-terminals of oligos. We also offer MGB phosphoramidite for labeling 5' terminus with an MGB moiety.