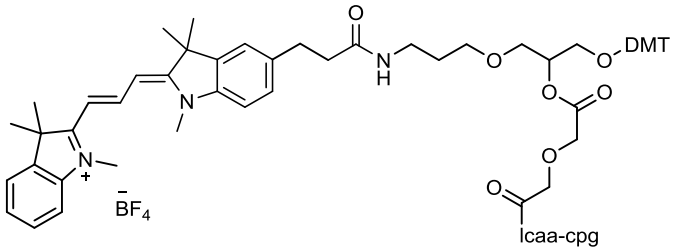
3'-Cyanine 3 CPG

Product No. BA 0408

Product Information



Since the early 1990's, cyanine dyes have been a valuable labeling tool for nucleic acids. Cyanine dyes were originally introduced by Waggoner[1] and co-workers and commercialized by Molecular Probes, and today, there are many cyanine dyes available. In general, cyanine dyes have high extinction coefficients with longer dyes having higher absorbance and emission wavelengths. These dyes are easy to use as they tend to have high fluorescence and low non-specific binding to biomolecules.[2] Our 3'-Cyanine 3 CPG allows incorporation of the cyanine 3 moiety in an oligonucleotide at the 3'end.

Use: BA 0408 can be used in oligonucleotide synthesis using standard concentration and coupling protocol. To maximize label retention, cleavage and deprotection should be done with potassium carbonate in methanol.

References:

1. a) Ernst, L.A.; Gupta, R.K.; Mujumdar, R.B., Waggoner, A.S. *Cytometry* **1989**, *10 (1)*, 3–10. b) Mujumdar, B.; Ernst, A. Mujumdar, S.R., Lewis, C.J.; Waggoner, A.S. *Bioconjugate Chemistry*,**1993**, *4(2)*, 105-111.
2. Lee, W.; von Hippel, P.H.; Marcus, A.H. *Nucleic Acids Res.* **2014**, *42*, 5967-5977.