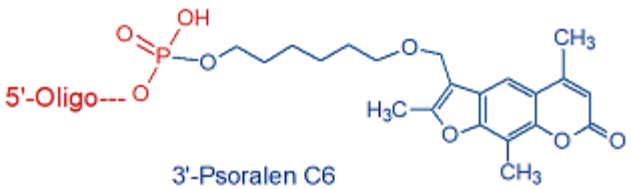
Oligo Modifications

For research use only. Not for use in diagnostic procedures for clinical purposes.

Psoralen C6-3'

Category	Intercalators
Modification Code	Pso-C6-3
Reference Catalog Number	26-6684
5 Prime	N
3 Prime	Y
Internal	N
Molecular Weight(mw)	420.4



3'-Psoralen C6
[26-6684-XX]

Psoralen C6 is a heterocyclic compound capable of intercalating between bases, and cross-link bases, in both double-stranded and triple-stranded DNA. It is attached to a C6 linker in order to facilitate a psoralen-modified oligonucleotide's ability to intercalate and cross-link with triple-stranded DNA. Psoralen is typically used as a ss/ds DNA intercalating or cross-linking reagent, for the purpose of probing nucleic acid secondary structure (1). Upon exposure to long wavelength UV light (350 nm), psoralen forms covalent cyclobutane linkages to thymidine. Psoralen can form two different types of adducts with thymidine. The first is a monoadduct, in which the psoralen moiety binds to one adjacent thymidine on the same or complimentary strand. The second is a diadduct, in which psoralen binds to two thymidines adjacent to it, either on the same or complimentary strand (2). Diadducts formed between adjacent thymidines are photo-reversable with short wavelength UV light (254 nm). In addition to cross-linking duplex DNA, Psoralen-C6 homopyrimidine oligos can be used to bind to a complementary homopurine-homopyrimidine duplex, to form a triple-helix that can then be cross-linked together at the triplex-duplex junction point (3). Psoralen-modified oligonucleotides are widely used as research tools; representative examples of such use are shown in these references (4,5). **References**

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