Biotin-NHS is an N-hydroxysuccinimide ester (NHS ester) of biotin. Biotin-NHS can be used to internally label an oligonucleotide with biotin at a non-T position (that is, at a G, C, or A position). To accomplish this, amino dG-C6/dC-C6/dA-C6 is first incorporated into the oligonucleotide, thereby placing an active primary amino group at the desired position. Biotin-NHS is then conjugated to the amino group in a separate reaction to form the final biotin-labeled product.

Biotin-NHS can also be used to biotinylate a large amount of oligonucleotide aminated at the 5'- or 3'-end, in aqueous solution and at relatively low cost (1).

References