Product Specifications

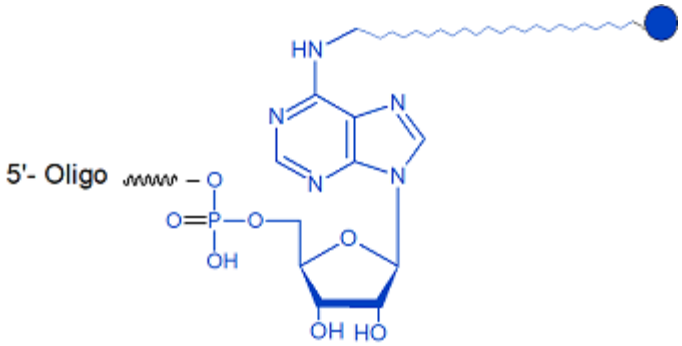
Custom Oligo Synthesis, antisense oligos, RNA oligos, chimeric oligos, Fluorescent dyes, Affinity Ligands, Spacers & Linkers, Duplex Stabilizers, Minor bases, labeled oligos, Molecular Beacons, siRNA, phosphonates Locked Nucleic Acids (LNA); 2′-5′ linked Oligos

Oligo Modifications

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

Oligo Affinity Support

Category	Affinity Ligands
Modification Code	OAS
Reference Catalog Number	26-6510
5 Prime	N
3 Prime	Y
Internal	N
Molecular Weight(mw)	0



Oligo Affinity Support

[26-6510-XX]

Oligo Affinity Support. Non-Cleavable Matrix.

Gene Link also offers oligos covalently linked to magnetic beads to be used as affinity support for the purification, capture and elution of the complimentary sequences. **Oligo Magnetic Beads.** Oligo Affinity Support is a non-cleavable support that can also be used for the purification, capture and elution of the complimentary sequences.

The Oligo-Affinity Support (OAS)5 consists of fibers with an inner core of Teflon, covalently coated with an organic layer of functionalized copolymers. A 25-carbon spacer arm terminating in adenosine with a DMT group at the 5'-position is attached to the support. Since the linkage to adenosine is stable to acid and base, the oligonucleotide formed by the standard synthesis protocol remains attached to the support after deprotection.

Researchers are able to choose from a wide selection of techniques for attaching oligonucleotides to solid supports. However, these techniques usually require synthesis and purification of an amino-modified oligonucleotide, followed by its covalent linkage to an appropriately activated solid support. While these techniques are relatively straightforward, there still exists a need to prepare affinity supports simply and directly.

For use as an affinity support for the purification of DNA binding proteins6, one oligonucleotide was synthesized and deprotected using ammonium hydroxide on the support. The complementary strand was then bound through normal hybridization. The affinity support was used to purify a sequence specific DNA binding protein 100 fold to near homogeneity. The Teflon support showed very low levels of non-specific binding of proteins. It also exhibited the further advantage of being composed of non-friable flexible fibers which do not shrink or swell. The matrix proved to be stable and reusable at least ten times. Although the most likely use for the OAS is in the preparation of affinity supports, ligations and kinase reactions can also be carried out.

References

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3. . Kadonaga, J.T Methods Enzymol, 1991, 208, 10-23.
4. Kirch, H.C.; Kruger,H and H.S. Holthausen, Nucleic Acids Res.

, 1991, 19, 3156.
5. Larson, C.L. and Verdine,G.L. Nucleic Acids Res., 1992, 20, 3525.