



Product Specifications

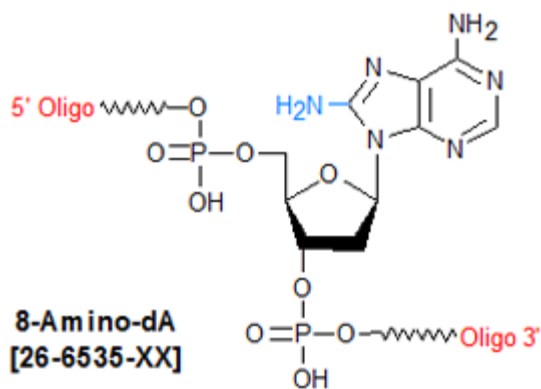
Custom Oligo Synthesis, antisense oligos, RNA oligos, chimeric oligos, Fluorescent dyes, Affinity Ligands, Spacers & Linkers, Duplex Stabilizers, Minor bases, labeled oligos, Molecular Beacons, siRNA, phosphonates Locked Nucleic Acids (LNA); 2'-5' linked Oligos

Oligo Modifications

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

8-amino-dA

Category	Duplex Stability
Modification Code	8-am-dA
Reference Catalog Number	26-6535
5 Prime	Y
3 Prime	Y
Internal	Y
Molecular Weight(mw)	328.22



8-Amino-deoxyAdenosine (8-Amino-dA) is an 8-amino-purine that is most commonly used to study the structural and functional properties of triple helices. The 8-amino group is able to form an additional Hoogsteen purine-pyrimidine hydrogen bond, which serves to increase triple helix stability (1). Moreover, it has been shown that triple-helix-forming oligos (TFO) containing 8-amino-dA form stable helices at neutral pH, instead of under acidic conditions (2). This property may be relevant for design of TFOs slated for in vivo work, which generally occurs under physiological pH (7.3-7.4) conditions. **References**
1. Cubero, E., Avino, A., de la Torre, B.G., Frieden, M., Eritja, R., Luque, F.J., Gonzalez, C., Orozco, M. Hoogsteen-based parallel-stranded duplexes of DNA. The effect of 8-amino derivatives. *J. Am. Chem. Soc.* (2002), **124**: 3133-3142.
2. Zhu, Q., Delaney, M.O., Greenberg, M.M. Observation and elimination of N-acetylation of oligonucleotides prepared using fast-protecting phosphoramidites and ultra-mild deprotection. *Bioorg. Med. Chem. Lett.* (2001), **11**: 11105-1107.