



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.

Puromycin

Category	Others
Modification Code	Puro
Reference Catalog Number	26-6603
5 Prime	N
3 Prime	Y
Internal	N
Molecular Weight(mw)	533.48



Puromycin can be attached to the 3' end of RNA and DNA oligos. Puromycin is an antibiotic that mimics transfer RNA. Puromycin binds in the ribosome's A site and forms a peptide bond with the growing peptide chain to block peptide elongation. By linking puromycin to synthetic RNA; a peptide-RNA fusion product can be formed. An application example is the use of 3'Puromycin to synthesize d(A27CC)-puromycin to which various mRNA sequences were then ligated. The mRNA sequence information was then translated in a reticulocyte lysate system. As the ribosome reached the poly-dA sequence, translation was stalled. Puromycin entered the ribosome A site and a peptide bond formed between the C-terminal of the synthesized peptide and the RNA encoding the peptide structure. The poly-dA sequence serves two purposes, first it stalls the ribosome thereby allowing puromycin to enter the A site and second it acts as a future capture site for oligo-dT-biotin. References: (1) S. Borman, C&EN, Feb. 12, 1996, 29-54. (2) R.W. Roberts and J.W. Szostak, Proc. Natl. Acad. Sci. USA, 1997, 94, 12297-302