

## Product Information

### DMT-dT phosphoramidite

**Cat. No.:** X24-03-LY056

**Size:** 1 g; 5 g; 10 g; 25 g; 100 g; 1 kg

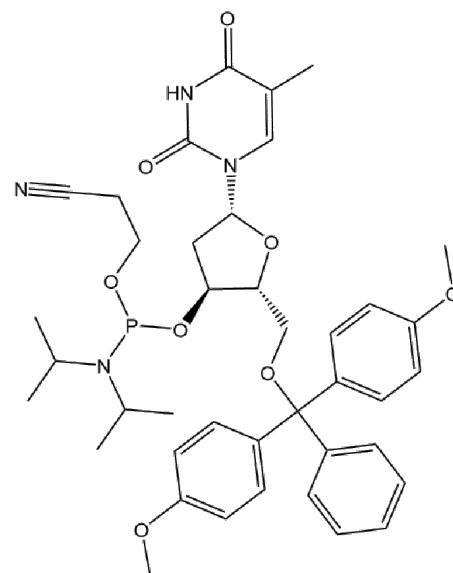
**MDL:** MFCD00055063

**CAS Number:** 98796-51-1

**PubChem CID:** 9940288

**Synonym:** 98796-51-1; 5'-Dimethoxytrityl-3'-deoxythymidine 2'-[(2-cyanoethyl)-(N, N-diisopropyl)]-phosphoramidite; 5'-O-[Bis(4-methoxyphenyl)PhMe]-thymidine 3'-[2-cyanoethyl N, N-bis(1-methylethyl)phosphoramidite]; 5'-O-DMT-thymidine 3'-CE phosphoramidite

**This product is for research use only and is not intended for diagnostic use.**



### Product Information

<b>Description</b>	DMT-dT phosphoramidite is a phosphoramidite monomer which is composed of <i>N, N</i> -dimethyl-2-fluoro-5-nitroaniline (DMT) and 2'-deoxythymidine (dT).
<b>Molecular Weight</b>	744.81
<b>Molecular Formula</b>	C <sub>40</sub> H <sub>49</sub> N <sub>4</sub> O <sub>8</sub> P
<b>IUPAC Name</b>	3-[[[(2 <i>R</i> , 3 <i>S</i> , 5 <i>R</i> )-2-[[Bis(4-methoxyphenyl)-phenylmethoxy]methyl]-5-(5-methyl-2,4-dioxopyrimidin-1-yl)oxolan-3-yl]oxy-[di(propan-2-yl)amino]phosphanyl]oxypropanenitrile
<b>InChI</b>	InChI=1S/C40H49N4O8P/c1-27(2)44(28(3)4)53(50-23-11-22-41)52-35-24-37(43-25-29(5)38(45)42-39(43)46)51-36(35)26-49-40(30-12-9-8-10-13-30,31-14-18-33(47-6)19-15-31)32-16-20-34(48-7)21-17-32/h8-10, 12-21, 25, 27-28, 35-37H, 11, 23-24, 26H2, 1-7H3, (H, 42, 45, 46)/t35-, 36+, 37+, 53?/m0/s1
<b>InChI Key</b>	UNOTXUFIWPRZJX-CEXSROIHSA-N
<b>Canonical SMILES</b>	CC1=CN(C(=O)NC1=O)C2CC(C(O2)COC(C3=CC=CC=C3)(C4=CC=C(C=C4)OC)C5=CC=C(C=C5)OC)OP(N(C(C)C)C(C)C)OCCC#N
<b>Isomeric SMILES</b>	CC1=CN(C(=O)NC1=O)[C@H]2C[C@@H]([C@H](O2)COC(C3=CC=CC=C3)(C4=CC=C(C=C4)OC)C5=CC=C(C=C5)OC)OP(N(C(C)C)C(C)C)OCCC#N
<b>Form</b>	White to off-white solid
<b>Purity</b>	≥98%
<b>Applications</b>	DMT-dT phosphoramidite can be used in polymerization reactions, often with other phosphoramidite monomers, to synthesize nucleic acid molecules with high molecular weights.



---

**Storage**                      Store at -20°C.

---

### Safety Information

---

**Personal Protective Equipment**                      Gloves, eyeshields, N95 mask

---

**Hazard Statements**                      H302-H315-H319-H335

---