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dU (Deoxyuridine) phosphoramidite

http://www.lumiprobe.com/p/du-phosphoramidite

dU amidite enables the addition of deoxyuridine nucleoside to the DNA chain to synthesize modified oligonucleotides. Deoxyuridine (dU) is a derivative of the nucleoside uridine and has H instead of hydroxy group at the 2'-position of the ribose. This amidite contains DMT at the 5'-end.

Oligos modification with dU affects the melting profiles of oligo duplexes via integrating 2'-deoxyuridine into nucleic acid sequences.

dU (Deoxyuridine) phosphoramidite can serve for oligonucleotide probes and as a research tool for duplex stability studies and those of DNA damage and repair mechanisms.

General properties

Appearance:	white to pale yellow powder
Molecular weight:	730.79
CAS number:	109389-30-2
Molecular formula:	$C_{39}H_{47}N_4O_8P$
IUPAC name:	5'-O-(4,4'-Dimethoxytrityl)-2'-deoxyuridine-3'-O-[O-(2-cyanoethyl)-N,N'-diisopropylphosphoramidite]
Solubility:	good in acetonitrile, DCM
Quality control:	NMR ^{1}H, NMR ^{31}P, HPLC-MS (95%)
Storage conditions:	Storage: 12 months after receival at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate.
Legal statement:	This Product is offered and sold for research purposes only. It has not been tested for safety and efficacy in food, drug, medical device, cosmetic, commercial or any other use. Supply does not express or imply authorization to use for any other purpose, including, without limitation, in vitro diagnostic purposes, in the manufacture of food or pharmaceutical products, in medical devices or in cosmetic products.

Oligo synthesis details

Diluent:	acetonitrile
Coupling conditions:	standard coupling, identical to normal nucleobases
Cleavage conditions:	ammonia, 2 h at room temperature
Deprotection conditions:	identical to protected nucleobases