Pyrene phosphoramidite dU (A270252)

Specifications:

Name:	Pyrene phosphoramidite dU
Description:	Pyrene is polycyclic aromatic hydrocarbon which is well-known for its ability to intercalate into DNA. Pyrene features intense blue fluorescence. Its parameters depend strongly on fluorophore microenvironment. Therefore, fluorescence spectra of pyrene are used for the extraction of structural information about site surrounding pyrene. Two pyrenes in close proximity usually form excimers easily detectable by excimer fluorescence. Pyrene can also be a FRET donor to other fluorophores such as perylene. With this phosphoramidite, pyrene can be introduced into DNA by means of automated synthesis. This pyrene phosphoramidite contains hydrocarbon moiety rigidly attached to deoxyuridine. This reagent allows the attachment of a pyrene fragment to 5', internal, or 3' positions (using universal support). This amidite requires no special handling, coupling, or deprotection conditions. Recommended diluent for it is acetonitrile.
Absorption Maxima:	260, 282, 365, 392 nm
Extinction Coefficient:	12600, 21900, 16000, 14200 M-1cm-1
Emission Maxima:	460 nm
Fluorescence Quantum Yield:	~0.1
CAS Number:	199920-17-7
Purity:	95% (by 1H and 31P NMR, and HPLC-MS).
Molecular Formula:	C57H55N4O8P
Molecular Weight:	955.04 kDa
Product Form:	Yellowish foam.
Solubility:	Good in dichloromethane and acetonitrile.
Storage:	Shipped at room temperature. Upon delivery, store in the dark at -20°C. Avoid prolonged exposure to light. Desiccate.
Disclaimer:	This product is for research use only. It is not intended for diagnostic or therapeutic use.

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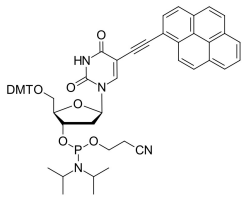
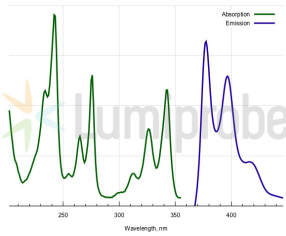
Images:



Structure of Pyrene dU phosphoramidite.



Absorption and emission spectra of pyrene fluorophore.