

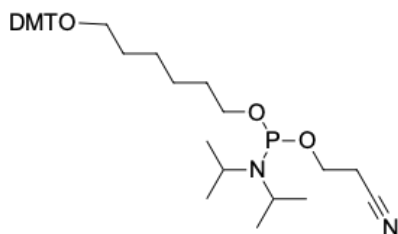
C6 Spacer phosphoramidite

<http://hk.lumiprobe.com/p/phosphoramidite-spacer-c6>

C6 spacer phosphoramidite serves as a crucial tool in nucleic acid chemistry, enabling researchers to design more effective oligonucleotides by incorporating hydrophobic spacers that enhance performance in various biochemical applications. Its ability to minimize unwanted interactions while providing structural flexibility makes it an invaluable reagent in modern molecular biology techniques. Multiple spacers can be added to achieve precise control over the length of the spacer arms, which is essential in studies involving hairpin loops and duplex formations.

The C6 spacer is hydrophobic, making it suitable for applications where water solubility is not critical. It effectively distances fluorescent dyes or other modifications from the oligonucleotide sequence, reducing quenching effects. For example, G-rich sequences can quench fluorescein; adding a spacer helps mitigate this issue.

This spacer can be utilized in various contexts, including PCR amplification and hybridization assays. It allows for flexibility in the design of probes and primers, which can be crucial for specific applications like Scorpion Primers and SMART detection assays.



外观: 無色油

分子量: 620.77

分子式: $C_{36}H_{49}N_2O_5P$

溶解度: DCM、乙腈、DMF、DMSO。對溶劑中的水分敏感。

质量控制: NMR 1H 、 ^{31}P 、HPLC-MS (95%)、功能測試

储存条件: 收到後 $-20^{\circ}C$ 避光保存 12 個月。運輸: 室溫最多可保存3週。乾燥。

法律声明: 本產品僅供研究目的提供和銷售。本產品並未經過食品、藥品、醫療器械、化妝品等領域的安全性和效力測試, 且未經明示或暗示授權用於其他任何用途, 包括但不限於體外診斷、人類或動物用途, 以及商業用途。

稀释剂: 無水乙腈

偶联条件: 標準條件與正常核鹼基相同。

切割条件: 在濃氫氧化銨中於 $60^{\circ}C$ 反應 5 小時 (或快速脫保護 amidites 1 小時)。AMA 混合物 (濃氨水/40% 甲胺 1:1) 在 $65^{\circ}C$ 下反應 15 分鐘。