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Biotin-16-dUTP, 1 mM Solution

Biotin-16-dUTP can be enzymatically incorporated into DNA via nick translation, random priming, or 3' end terminal labeling. The terminal deoxynucleotidyl transferase (TdT)-mediated biotin-dUTP nick end-labeling (TUNEL) method has been commonly used for apoptosis studies.

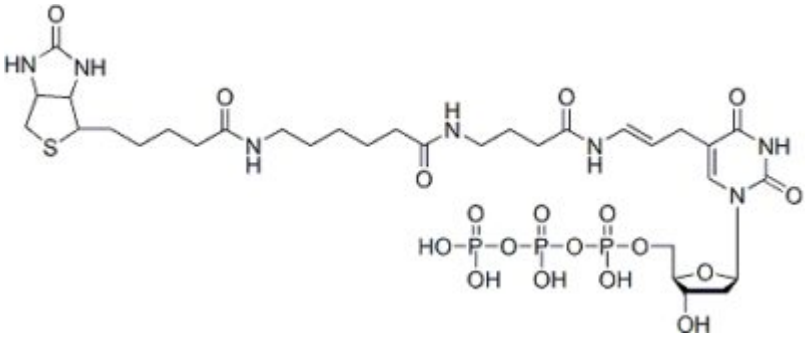
Product attributes

CAS number	136632-31-0

Product Description

Biotin-16-dUTP can be enzymatically incorporated into DNA via nick translation, random priming, or 3' end terminal labeling. The terminal deoxynucleotidyl transferase (TdT)-mediated biotin-dUTP nick end-labeling (TUNEL) method has been commonly used for apoptosis studies. The number '16' is the number of atoms in the linker between biotin and dUTP. Biotium also offers biotin-11-dUTP (catalog no. 40029) and biotin-20-dUTP (catalog no. 40030). The length of the linker affects the incorporation efficiency of the biotin-dUTP probe into DNA using DNA polymerases, and it also affects biotin/avidin or biotin/streptavidin. In general, the shorter the linker, the more efficiently the biotin-dUTP is incorporated into DNA by DNA polymerases. On the other hand, a longer linker should facilitate interaction between biotin and avidin or streptavidin. Biotin-16-dUTP is also available as a lyophilized solid (catalog no. 40022-1).

- 1 mM solution in pH 7.5 Tris-HCl buffer
- Store at -20°C
- $C_{32}H_{48}N_7O_{18}P_3S\ Li_4$
- MW: 971.5
- [136632-31-0]



References

1. Anal Biochem 193, 2 (1991).
2. J Cell Biol 119, 493 (1992).
3. NeuroReport, 7, 61 (1995).
4. Biotechniques 19, 800 (1995).
5. Journal of Virological Methods (2013), http://dx.doi.org/doi:10.1016/j.jviromet.2013.12.019
6. The Open Genomics Journal 5, 18-29 (2012)