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Amino-11-UTP

http://www.lumiprobe.com/p/amino-11-utp

Amino-UTP is uridine triphosphate with an amino group, which is designed for enzymatic incorporation of the amino group into the RNA molecule during *in vitro* transcription using T7, T3, and SP6 RNA polymerases. The enzymatic reaction results in the RNA molecule with amino groups, which can be conjugated with amine-reactive reagents such as NHS esters of fluorescent dyes or biotin.

The amino group is separated from uridine with a long linker of 11 atoms; it is longer than frequently used C3-allyl linker and prevents the fluorophore from potential static quenching after RNA labeling via the amino group. The efficacy of RNA synthesis using amino-11-UTP is almost the same as that when using non-labeled nucleotide triphosphates.

Incorporation of amino-11-UTP with subsequent labeling via the amino group is used for cRNA synthesis and microarray analysis.

Structure of Amino-11-UTP

General properties

Appearance: off white solid

Molecular weight: 920.37

Molecular formula: $C_{18}H_{54}N_4Li_3O_{30}P_3$ Solubility: good in water

Quality control: NMR ¹H, HPLC-MS (95%)

Storage conditions: Storage: 24 months after receival at -20°C. Transportation: at room temperature for up to 3 weeks.

Desiccate.