

Materials List for:

Nucleoside Triphosphates - From Synthesis to Biochemical Characterization

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Materials

Name	Company	Catalog Number	Comments
Tributylammonium pyrophosphate	Sigma Aldrich	P8533	Hygroscopic solid, keep under Ar
2-Chloro-1,3,2-benzodioxaphosphorin-4-one	Sigma Aldrich	324124	Moisture sensitive
Pyridine	Sigma Aldrich	82704	Under molecular sieves
Dioxane	Sigma Aldrich	296309	Under molecular sieves
Dimethylformamide (DMF)	Sigma Aldrich	40248	Under molecular sieves
Acetonitrile	Fisher Scientific		HPLC grade
Triethylamine	Sigma Aldrich	90342	
Tributylamine	Sigma Aldrich	90781	
ddH ₂ O	Milli-Q		deionized and purified water, autoclaved in the presence of Diethylpyrocarbonate (DEPC)
Diethylpyrocarbonate (DEPC)	Sigma Aldrich	159220	
D ₂ O	Cambridge Isotope Laboratories, Inc.	DLM-4-25	
γ-[³² P]-ATP	Hartmann Analytics	FP-301	
Natural dNTPs	Promega	U1420	
Vent (exo ⁻) DNA polymerase	NEB	M0257S	
DNA polymerase I, Large (Klenow) Fragment	NEB	MO210S	
9°N _m DNA polymerase	NEB	MO260S	
Terminal deoxynucleotidyl Transferase (TdT)	Promega	M828A	
Pwo DNA polymerase	Peqlab	01 01 5010	
T4 PNK	Thermo Scientific	EK0032	
Acrylamide/bisacrylamide (19:1, 40%)	Serva	10679.01	
Agarose	Apollo Scientific	BIA1177	
G10 Sephadex	Sigma	G10120	
Urea	Apollo Scientific	BIU4110	
Jupiter semipreparative RP-HPLC column (5μ C18 300 Å)	Phenomenex		
Gene Q Thermal Cycler	Bioconcept	BYQ6042E	
PCR vials	Bioconcept	3220-00	
HPLC system	Amersham Pharmacia Biotech		Äkta basic 10/100
All oligonucleotides were purchased from Microsynth and purified by PAGE			

5'-CAAGGACAAAATAC CTGTATTCCTT P1			
5'-GACATCATGAGAGA CATCGCCTCTGGGCTA ATAGGACTACTTCTAAT CTGTAAGAGCAGATCC CTGGACAGGCAAGGAA TACAGGTATTTTGCCTTG T1			
5'-GAATTCGATATCAAG P2			
<p>More information on experimental procedures and equipment can be found in the following articles: <i>Chem. Eur. J.</i> 2012, 18, 13320-13330 <i>Org. Biomol. Chem.</i> 2013, DOI: 10.1039/C3OB40842F</p>			