

Reagents for Nucleic Acid Synthesis

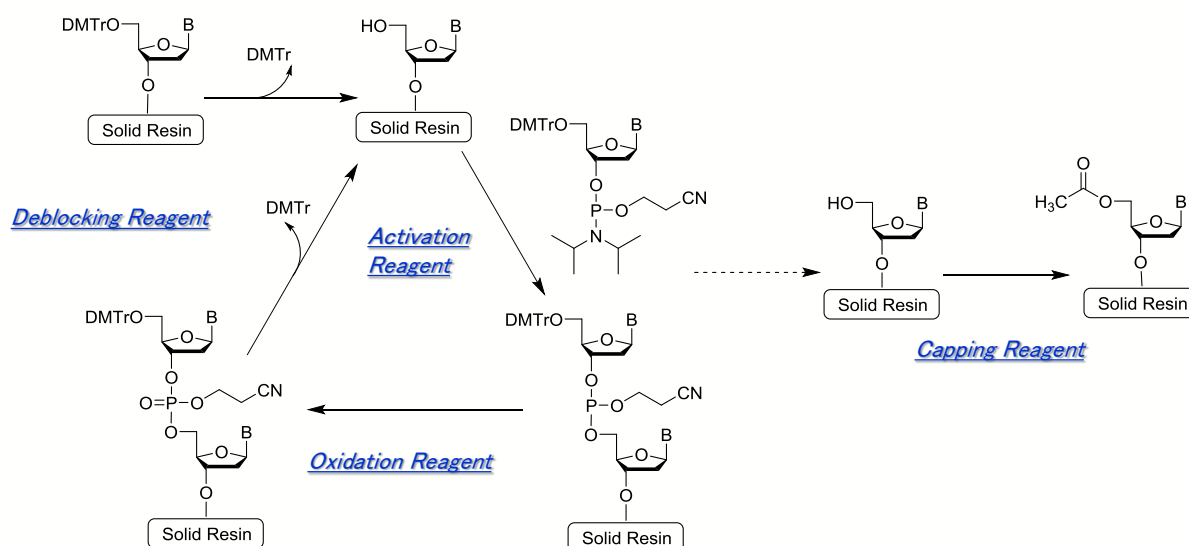
“Nucleic acid medicine” has attracted a lot of attention as next-generation pharmaceuticals following “small molecular medicine” and “antibody medicine”. Nucleic acid medicine is the generic name of pharmaceutical products using DNA or RNA controlling a genetic information, and the nucleic acid is prepared by chemical synthesis.

We line up the reagents used in the phosphoramidite method for nucleic acid synthesis.

We can customize the composition and package size.

Oligonucleotides synthesis

For the oligonucleotides synthesis, solid phase synthesis method using amidite called phosphoramidite method is generally used. This process is Detritylation, Coupling, Capping and Oxidation. It is synthesized by repeating this cycle until the desired chain length is reached. This reaction is performed by an automatic synthesizer.



Reaction reagents for the oligonucleotides synthesis

Features

- Lineup of all reagents used in the phosphoramidite method
- Low moisture guaranteed by high dehydration technology
- Customizable the composition and package size
- Color labels by reagent type to prevent the misplacement

Reagent for ÄKTA oligopilot synthesizer

- Handling the reagents for ÄKTA oligopilot synthesizer
- Use acetonitrile as a solvent

Deblocking Reagent

Code No.	Product Name	Pkg. Size	Water content	Storage Condition
049-34443	Deblocking Solution [Dichloroacetic Acid-Toluene (3:97)]	100mL	≤ 40 ppm	Keep at RT
043-34441		3L		

Activator Reagent

Code No.	Product Name	Pkg. Size	Water content	Storage Condition
011-19681	Activator Solution-1 (0.25mol/L 4,5-Dicyanoimidazole, Acetonitrile Solution)	3L	≤ 30 ppm	Keep at RT
011-19701	Activator Solution-2 (0.45mol/L 1H-Tetrazole, Acetonitrile Solution)	3L	≤ 30 ppm	Keep at RT
017-20014	Activator Solution-3 (0.25mol/L 5-Benzylthio-1H-tetrazole, Acetonitrile Solution)	100mL	≤ 10 ppm	Keep at RT
013-20011		3L		
014-19693	Activator Solution-4 (0.25mol/L 5-Ethylthio-1H-tetrazole, Acetonitrile Solution)	100mL	≤ 10 ppm	Keep at RT
018-19691		3L		

Capping Reagent

Code No.	Product Name	Pkg. Size	Water content	Storage Condition
037-25393	Cap A Solution [1-Methylimidazole-Acetonitrile (2:8)]	100mL	≤ 100 ppm	Keep at RT
031-25391		3L		
030-25383	Cap B1 Solution [Acetic Anhydride-Acetonitrile (4:6)]	100mL	-	Keep at RT
034-25381		3L		
033-25373	Cap B2 Solution [2,6-Lutidine-Acetonitrile (6:4)]	100mL	≤ 100 ppm	Keep at RT
037-25371		3L		
030-25403	Cap B Solution [Acetic Anhydride-2,6-Lutidine-Acetonitrile (2:3:5)]	100mL	-	Keep at RT
034-25401		3L		

Oxidation Reagent

Code No.	Product Name	Pkg. Size	Water content	Storage Condition
092-05341	Oxidizing Solution [Iodine Solution (abt. 0.05mol/L)][Pyridine:Water(9:1)]	3L	-	Keep at RT

Reagent for another synthesizer

Deblocking Reagent

Code No.	Product Name	Pkg. Size	Water content	Storage Condition
046-28924	Deblocking Solution-1 (3w/v% Trichloroacetic Acid, Dichloromethane Solution)	100mL	≤ 40 ppm	Keep at 25°C or less.
042-28921		3L		
049-34443	Deblocking Solution [Dichloroacetic Acid-Toluene (3:97)]	100mL	≤ 40 ppm	Keep at RT
043-34441		3L		

Activator Reagent

Code No.	Product Name	Pkg. Size	Water content	Storage Condition
011-19681	Activator Solution-1 (0.25mol/L 4,5-Dicyanoimidazole, Acetonitrile Solution)	3L	≤ 10 ppm	Keep at RT
011-19701	Activator Solution-2 (0.45mol/L 1H-Tetrazole, Acetonitrile Solution)	3L	≤ 10 ppm	Keep at RT
017-20014	Activator Solution-3 (0.25mol/L 5-Benzylthio-1H-tetrazole, Acetonitrile Solution)	100mL	≤ 10 ppm	Keep at RT
013-20011		3L		
014-19693	Activator Solution-4 (0.25mol/L 5-Ethylthio-1H-tetrazole, Acetonitrile Solution)	100mL	≤ 10 ppm	Keep at RT
018-19691		3L		

Capping Reagent

Code No.	Product Name	Pkg. Size	Water content	Storage Condition
036-18991	Cap A Solution-1 (10vol% Acetic anhydride-Tetrahydrofuran Solution)	3L	≤ 100 ppm	Keep at RT
033-19001	Cap B Solution-1 [Tetrahydrofuran/1-Methylimidazole/Pyridine (8:1:1) Solution]	3L	≤ 100 ppm	Keep at RT
036-19013	Cap A Solution-2 (Tetrahydrofuran/Acetic Anhydride/Pyridine (8:1:1) Solution)	100mL	≤ 100 ppm	Keep at RT
030-19011		3L		
033-19023	Cap B Solution-2 [(10vol% 1-Methylimidazole/Tetrahydrofuran Solution)]	100mL	≤ 100 ppm	Keep at RT
037-19021		3L		

Oxidation Reagent

Code No.	Product Name	Pkg. Size	Water content	Storage Condition
156-02451	Oxidizing Solution-2 Composition: 0.1mol/L I ₂ ·THF:Pyridine:Water(78:20:2)Solution	3L	-	Keep at RT

Sulfurization Reagent

Code No.	Product Name	CAS No.	Pkg. Size	Water content	Storage Condition
166-28251	5-Phenyl-3H-1,2,4-dithiazol-3-one	7047-10-1	5g	≤ 200 ppm	Keep at 2-10 °C
164-28252			25g		

Reaction solvent for oligonucleotides synthesis

- Low moisture guarantee makes it suitable for nucleic acid synthesis.
- Available from 3L laboratory scale to industrial scale.

Code No.	Product Name	Pkg. Size	Water content	Storage Condition
018-14451	Acetonitrile, Super Dehydrated	3L	≤ 10 ppm	Keep at RT
015-27117		18L		
167-18455	Pyridine, Dehydrated	500mL	≤ 50 ppm	Keep at RT
165-18451		3L		
204-17915	Toluene, Super Dehydrated	500mL	≤ 10 ppm	Keep at RT
206-17914		3L		

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