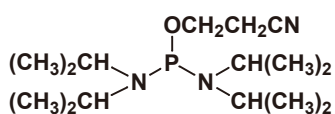


# Nucleic Acid Medicine Synthesis Research Reagents

Recently, nucleic acid medicines have been attracting much attention.\*) Nucleic acid medicines are pharmaceutical products produced from the structural components of DNA and RNA, called nucleic acid or oligonucleotide medicine. Through direct action on gene expression and pathogenic proteins, these medicines hold great promise for treating diseases that were formerly difficult to treat. As a pharmaceutical product, they are second only to antibody drugs, and the nucleic acid medicine market is expected to expand in the near future. These are our products for the synthetic studies of nucleic acid medicines. For more information, please refer to the products application information of our website.

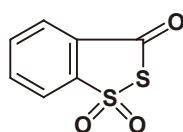
\*) V. K. Sharma, P. Rungta, A. K. Prasad, *RSC Adv.* **2014**, 4, 16618.

## Phosphoramidation Reagent<sup>1-3)</sup>

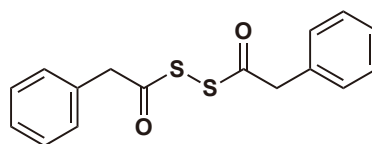


**2-Cyanoethyl N,N,N',N'-Tetraisopropylphosphordiamidite**  
1g / 5g  
[C2228]

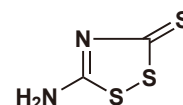
## Sulfur-Transfer Reagents<sup>4-7)</sup>



**Beaucage Reagent**  
1g / 5g  
[B3125]

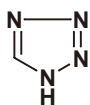


**Bis(phenylacetyl) Disulfide**  
5g / 25g  
[B3623]

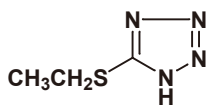


**Xanthane Hydride**  
25g / 100g / 500g  
[X0001]

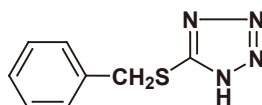
## Condensation Activators<sup>8-11)</sup>



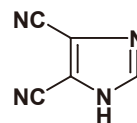
**1H-Tetrazole**  
5g / 25g  
[T1017]



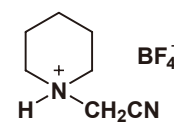
**5-(Ethylthio)-1H-tetrazole**  
1g / 5g  
[E0670]



**5-(Benzylthio)-1H-tetrazole**  
25g  
[B3020]

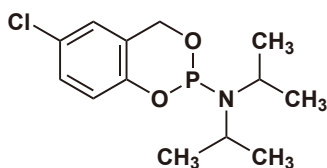


**4,5-Dicyanoimidazole**  
25g / 250g  
[D2026]

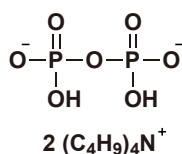


**1-(Cyanomethyl)piperidinium Tetrafluoroborate**  
5g  
[C2421]

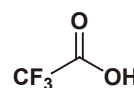
## 5'-O-Triphosphorylation Reagents<sup>12)</sup>



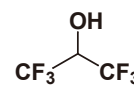
**5-Chlorosaligenyl-N,N-diisopropylphosphoramidite**  
200mg / 1g  
**New** [C3326]



**Bis(tetrabutylammonium) Dihydrogen Pyrophosphate**  
200mg / 1g  
**New** [B5440]



**TFA**  
25g / 100g / 500g  
[T0431]



**HFIP**  
25g / 100g / 500g  
[H0424]

## Deprotection Reagents

# Nucleic Acid Medicine Synthesis Research Reagents

## Protecting Reagents for Hydroxyl and Amino Groups

|  |                              |
|--|------------------------------|
| <b>4,4'-Dimethoxytrityl Chloride</b>         | 5g / 25g [D1612]             |
| <b>Benzoyl Chloride</b>                      | 25mL / 500mL [B0105]         |
| <b>Isobutyryl Chloride</b>                   | 25g / 100g / 500g [I0115]    |
| <b>N,N-Dimethylformamide Dimethyl Acetal</b> | 25mL / 100mL / 500mL [D1293] |

## Protected Nucleosides for Oligonucleotide Synthesis

|  |                    |
|--|--------------------|
| <b>N<sup>6</sup>-Benzoyl-2'-deoxyadenosine Hydrate</b>                     | 100mg [B3101]      |
| <b>N<sup>6</sup>-Benzoyl-5'-O-(4,4'-dimethoxytrityl)-2'-deoxyadenosine</b> | 100mg / 1g [B3103] |
| <b>5'-O-(4,4'-Dimethoxytrityl)thymidine</b>                                | 5g / 25g [D3566]   |
| <b>N<sup>2</sup>-Isobutyryl-2'-deoxyguanosine</b>                          | 100mg / 1g [I0700] |
| <b>N<sup>4</sup>-Benzoyl-2'-deoxycytidine</b>                              | 100mg / 1g [B3102] |
| <b>N<sup>4</sup>-Benzoyl-5'-O-(4,4'-dimethoxytrityl)-2'-deoxycytidine</b>  | 1g / 5g [B3087]    |
| <b>N<sup>6</sup>-Benzoyladenosine Hydrate</b>                              | 1g / 5g [B3093]    |
| <b>N<sup>6</sup>-Dibenzoyladenosine 2',3'-Dibenzoate</b>                   | 100mg / 1g [B3460] |
| <b>N<sup>2</sup>-Isobutyrylguanosine Monohydrate</b>                       | 100mg / 1g [I0699] |
| <b>N<sup>4</sup>-Benzoylcytidine</b>                                       | 1g / 5g [B3094]    |

## 2'-Substituted Nucleosides

|   |                    |
|---|--------------------|
| <b>2'-Deoxy-2'-fluorouridine</b>          | 1g / 5g [D3615]    |
| <b>2'-Deoxy-2'-fluorocytidine Hydrate</b> | 1g [D3614]         |
| <b>2'-O-Methyladenosine</b>               | 1g [M2291]         |
| <b>2'-O-Methyluridine</b>                 | 1g / 5g [M2290]    |
| <b>2'-O-Methylguanosine Hydrate</b>       | 200mg / 1g [M2318] |
| <b>2'-O-Methylcytidine</b>                | 200mg / 1g [M2317] |

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