



**BIOSAN**

Reagents for PCR  
and molecular biology

# CATALOG





# BIOSAN

## [ Quality ]



Guarantee high quality and provide real analytical data.

Certificated according ISO 9001:2015, ISO 13485:2016.

## [ Price ]



Flexible price depending on the volume of the order.

## [ Delivery ]



Hundreds of laboratories in 25 countries across the world entrust their work to Biosan raw materials.

## [ Support ]



Technical support and consult by highly qualified staff.



Biosan is the largest manufacturer of nucleotides in Russia. The company has been producing chemical reagents since 1991. Practically all the Russian manufacturers of medical diagnostic PCR tests buy Biosan reactive chemicals. Deoxynucleoside triphosphates (dNTPs) are the most demanded products of the company.



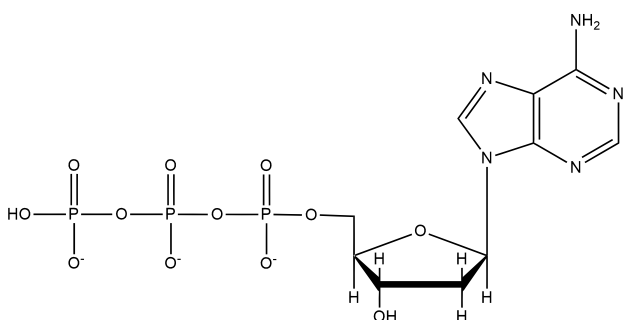
## Contents:

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## Standard nucleotides

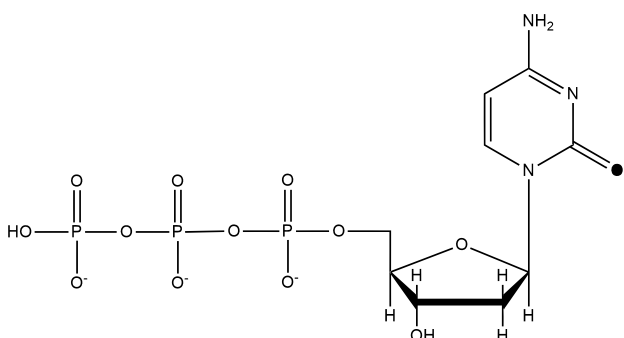
### 2'-Deoxyribonucleoside-5'-triphosphates

dNTPs are suitable for all molecular biology applications including PCR/qPCR, reverse transcription, RT-PCR, DNA labeling and sequencing.



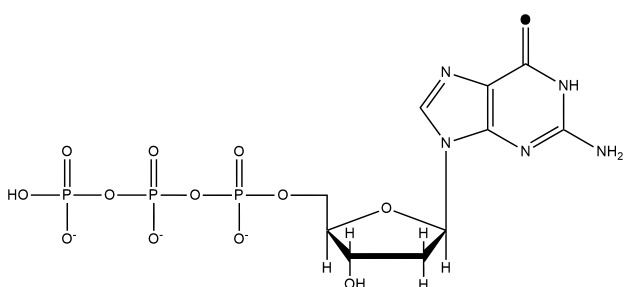
#### dATP- 2'-deoxyadenosine-5'-triphosphate

| Name                                    | Cat. #   | Vol.   |
|---|----------|--------|
| dATP- 2'-deoxyadenosine-5'-triphosphate | N-dA0100 | 100 µl |
|   | N-dA1000 | 1 ml   |



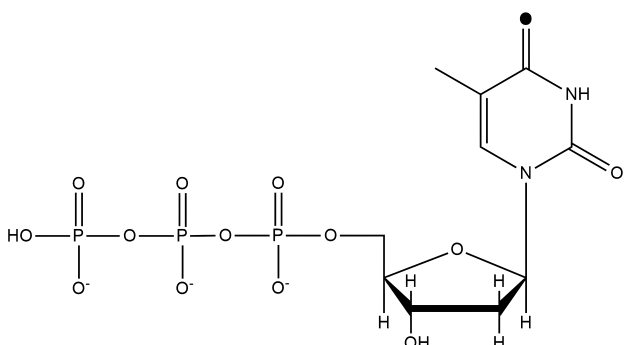
#### dCTP- 2'-deoxycytidine-5'-triphosphate

| Name                                   | Cat. #   | Vol.   |
|--|----------|--------|
| dCTP- 2'-deoxycytidine-5'-triphosphate | N-dC0100 | 100 µl |
|  | N-dC1000 | 1 ml   |



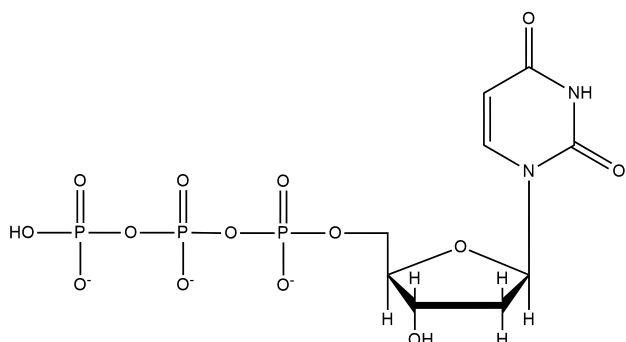
#### dGTP -2'-deoxyguanosine-5'-triphosphate

| Name                                    | Cat. #   | Vol.   |
|---|----------|--------|
| dGTP -2'-deoxyguanosine-5'-triphosphate | N-dG0100 | 100 µl |
|   | N-dG1000 | 1 ml   |



#### TTP - thymidine-5'-triphosphate

| Name                            | Cat. #   | Vol.   |
|---------------------------------|----------|--------|
| TTP - thymidine-5'-triphosphate | N-dT0100 | 100 µl |
|                                 | N-dT1000 | 1 ml   |



### dUTP – 2'-deoxyuridine-5'-triphosphate

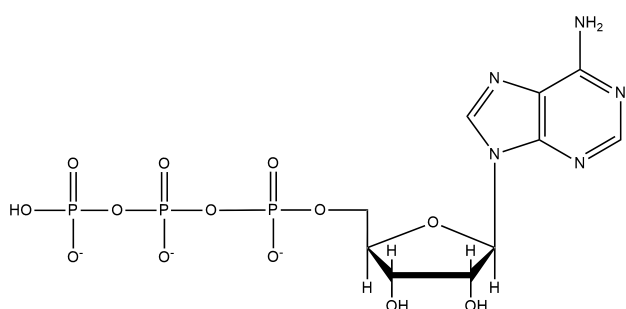
| Name                                   | Cat. #   | Vol.   |
|--|----------|--------|
| dUTP – 2'-deoxyuridine-5'-triphosphate | N-dU0100 | 100 µl |
|  | N-dU1000 | 1 ml   |

### dNTP Bundles

| Name  | Cat. # | Vol.      |
|---|--------|-----------|
| dNTP Set (100 mM each of dATP, dCTP, dGTP, TTP) water solution  | NS-101 | 4×100 µl  |
|   | NS-110 | 4×1000 µl |
| dNTP Set (100 mM each of dATP, dCTP, dGTP, TTP) in TE buffer*   | NS-301 | 4×100 µl  |
|   | NS-310 | 4×1000 µl |
| dNTP Set (100 mM each of dATP, dCTP, dGTP, dUTP) water solution | NS-201 | 4×100 µl  |
|   | NS-210 | 4×1000 µl |
| dNTP Set (100 mM each of dATP, dCTP, dGTP, dUTP) in TE buffer*  | NS-401 | 4×100 µl  |
|   | NS-410 | 4×1000 µl |

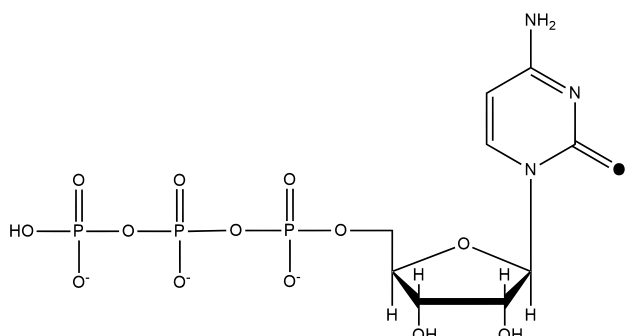
\* – 10 mM Tris-HCl pH 7.5, 1 mM EDTA

### Nucleoside-5'-triphosphates (NTPs)



### ATP- adenosine-5'-triphosphate

| Name                           | Cat. #   | Vol.   |
|--------------------------------|----------|--------|
| ATP- adenosine-5'-triphosphate | N-rA0100 | 100 µl |
|                                | N-rA1000 | 1 ml   |

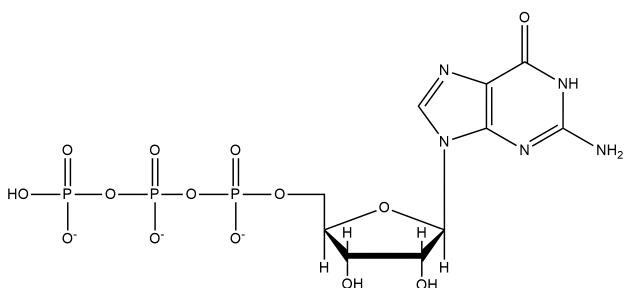


### CTP- cytidine-5'-triphosphate

| Name                          | Cat. #   | Vol.   |
|-------------------------------|----------|--------|
| CTP- cytidine-5'-triphosphate | N-rC0100 | 100 µl |
|                               | N-rC1000 | 1 ml   |

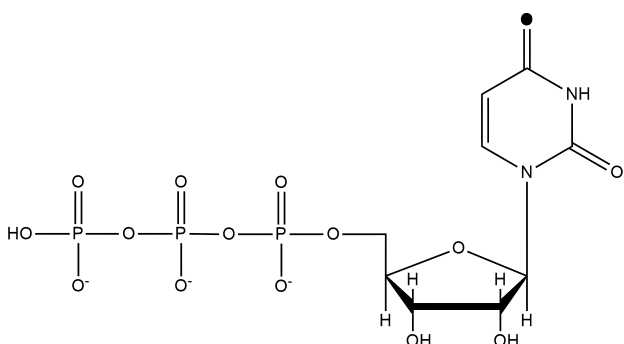
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Reagents for PCR and molecular biology



## GTP – guanosine-5'-triphosphate

| Name                            | Cat. #   | Vol.   |
|---------------------------------|----------|--------|
| GTP – guanosine-5'-triphosphate | N-rG0100 | 100 µl |
|                                 | N-rG1000 | 1 ml   |



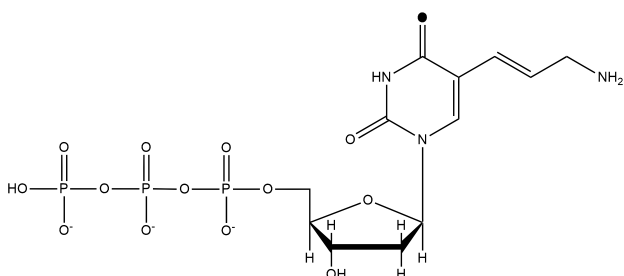
## UTP – uridine-5'-triphosphate

| Name                          | Cat. #   | Vol.   |
|-------------------------------|----------|--------|
| UTP – uridine-5'-triphosphate | N-rU0100 | 100 µl |
|                               | N-rU1000 | 1 ml   |

## NTP Bundles

| Name  | Cat. #  | Vol.      |
|---|---------|-----------|
| NTP Set (100 mM each of ATP, CTP, GTP, UTP) TE bufer (10 mM Tris-HCl pH 7.5, 1 mM EDTA) | rNS-401 | 4×100 µl  |
|   | rNS-410 | 4×1000 µl |
| NTP Set (100 mM each of ATP, CTP, GTP, UTP, water solution)                             | rNS-101 | 4×100 µl  |
|   | rNS-110 | 4×1000 µl |

# Modified Deoxyribonucleoside-5'-triphosphates



## 5-(3-Aminoallyl)-2'-deoxyuridine 5'-triphosphate (AA-dUTP)

Formula:  $C_{12}H_{20}N_3O_7P_3$

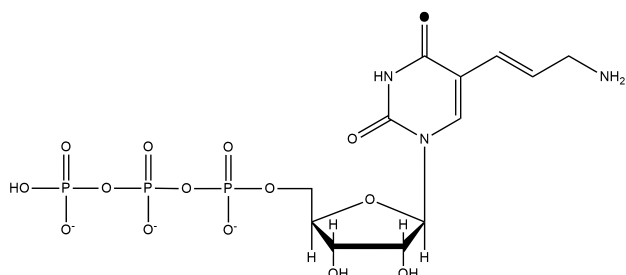
Molecular Weight (MW): 523.2 (free acid)

Concentration: 100 mM, water solution

Purity: HPLC ≥96%

Storage conditions: -20°C

| Name    | Cat. #   | Vol.   |
|---------|----------|--------|
| AA-dUTP | N-300100 | 100 µl |
|         | N-301000 | 1 ml   |



### 5-(3-Aminoallyl)-2'-uridine 5'-triphosphate (AA-UTP)

Formula:  $C_{12}H_{20}N_3O_{15}P_3$

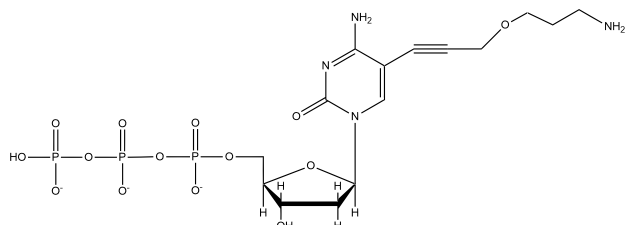
Molecular Weight (MW): 539.2 (free acid)

Concentration: 100 mM, water solution

Purity: HPLC  $\geq 96\%$

Storage conditions:  $-20^{\circ}\text{C}$

| Name   | Cat. #   | Vol.              |
|--------|----------|-------------------|
| AA-UTP | N-310100 | 100 $\mu\text{l}$ |
|        | N-311000 | 1 ml              |



### 7-amino-(4-oxa-hept-1-ynyl)-2'-deoxycytidine-5'-triphosphate tetralithium salt (NH<sub>2</sub>-7-dCTP)

Formula:  $C_{15}H_{25}N_4O_{14}P_3$

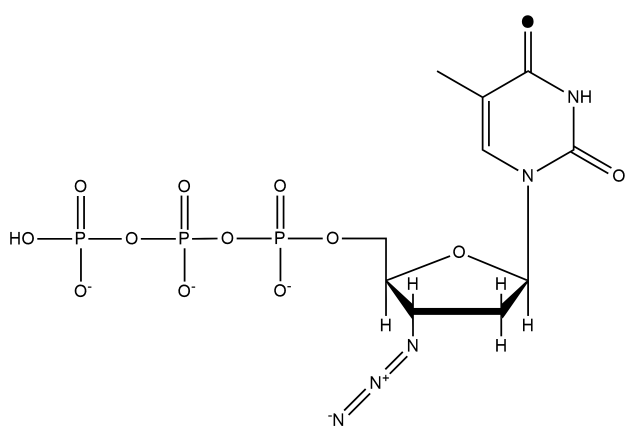
Molecular Weight (MW): 578.28 (free acid)

Concentration: 1 mM water solution (Li<sup>+</sup>, K<sup>+</sup> or NH<sub>4</sub><sup>+</sup> salt solution)

Purity: HPLC  $\geq 96\%$

Storage conditions:  $-20^{\circ}\text{C}$

| Name                    | Cat. #   | Vol.              |
|-------------------------|----------|-------------------|
| NH <sub>2</sub> -7-dCTP | N-330100 | 100 $\mu\text{l}$ |
|                         | N-331000 | 1 ml              |



### 3'-Azido-3'-deoxythymidine-5'-triphosphate (AZT-TP)

Formula:  $C_{10}H_{16}N_5O_{13}P_3$

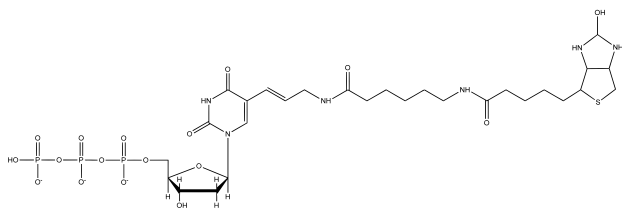
Molecular Weight (MW): 507.16 (free acid)

Concentration: 100 mM, water solution

Purity: HPLC  $\geq 96\%$

Storage conditions:  $-20^{\circ}\text{C}$

| Name   | Cat. #   | Vol.              |
|--------|----------|-------------------|
| AZT-TP | N-400100 | 100 $\mu\text{l}$ |
|        | N-401000 | 1 ml              |



### 5-[N-(N-biotinyl--aminocaproyl)-3-aminoallyl]-2'-deoxyuridine-5'-Triphosphate (Biotin-11-dUTP)

Formula:  $C_{28}H_{45}NO_{17}P_3$

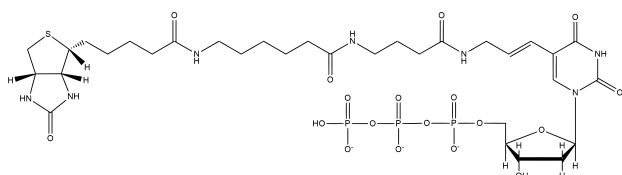
Molecular Weight (MW): 862.18 (free acid)

Concentration: 10 mM water solution (NH<sub>4</sub><sup>+</sup> salt)

Purity: HPLC ≥96%

Storage conditions: -20°C

| Name           | Cat. #   | Vol.   |
|----------------|----------|--------|
| Biotin-11-dUTP | N-200010 | 100 µl |
|                | N-200100 | 1 ml   |



### 5-{7-N-[6-N-(Biotinyl)-aminocaproyl]-amino-4-oxa-hept-1-ynyl} - 2'-deoxycytidine-5'-triphosphate (Biotin-15-dCTP)

Formula:  $C_{50}H_{45}NO_{17}P_3$

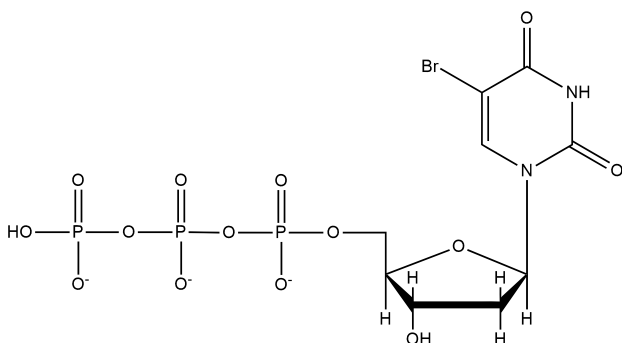
Molecular Weight (MW): 901.50 (free acid)

Concentration: 1 mM water solution (Li<sup>+</sup>, Na<sup>+</sup>, K<sup>+</sup> or NH<sub>4</sub><sup>+</sup> salt solution)

Purity: HPLC ≥96%

Storage conditions: -20°C

| Name           | Cat. #   | Vol.   |
|----------------|----------|--------|
| Biotin-15-dCTP | N-210010 | 100 µl |
|                | N-210100 | 1 ml   |



### 5-Bromo-2'-deoxyuridine-5'-triphosphate (Br-dUTP)

Formula:  $C_9H_{14}BrNO_{14}P_3$

Molecular Weight (MW): 547.02 (free acid)

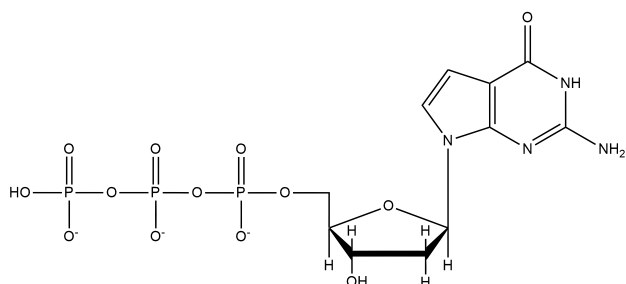
Concentration: 1 mM water solution (Na<sup>+</sup> salt solution)

Purity: HPLC ≥96%

Storage conditions: -20°C

| Name    | Cat. #   | Vol.   |
|---------|----------|--------|
| Br-dUTP | N-500010 | 100 µl |
|         | N-500100 | 1 ml   |





### 7-Deaza-2'-deoxyguanosine-5'-triphosphate (7-deaza-dGTP)

Formula:  $C_{11}H_{17}N_4O_{13}P_3$

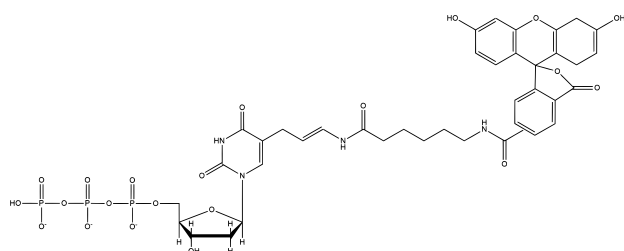
Molecular Weight (MW): 506.17 (free acid)

Concentration: 1 mM water solution

Purity: HPLC  $\geq 96\%$

Storage conditions:  $-20^{\circ}C$

| Name         | Cat. #   | Vol.        |
|--------------|----------|-------------|
| 7-deaza-dGTP | N-520100 | 100 $\mu$ l |
|              | N-521000 | 1 ml        |



### Fluorescein-5(6)-carboxamidocaproyl-[5-(3-aminoallyl)-2' deoxyuridine 5'-triphosphate] (Flu-12-dUTP)

Formula:  $C_{39}H_{40}N_4O_{21}P_3$

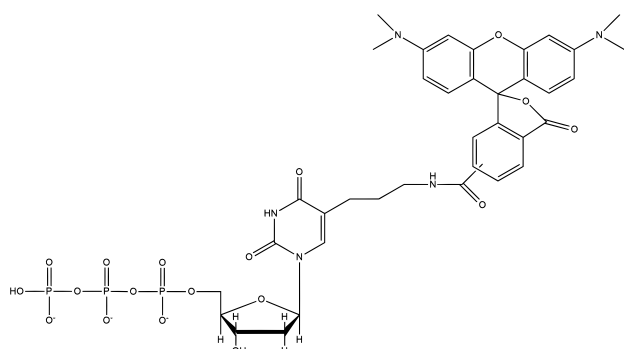
Molecular Weight (MW): 993.67 (free acid)

Concentration: 1 mM water solution (NH<sub>4</sub><sup>+</sup> salt)

Purity: HPLC  $\geq 96\%$

Storage conditions:  $-20^{\circ}C$

| Name        | Cat. #   | Vol.        |
|-------------|----------|-------------|
| Flu-12-dUTP | N-800100 | 100 $\mu$ l |
|             | N-801000 | 1 ml        |



### Tetramethylrhodamine-5(6)-[5-(3-carboxyaminoallyl)-2'-deoxyuridine-5'-triphosphate (Tamra-5-dUTP)

Formula:  $C_{35}H_{40}N_5O_{18}P_3$

Molecular Weight (MW): 935.66 (free acid)

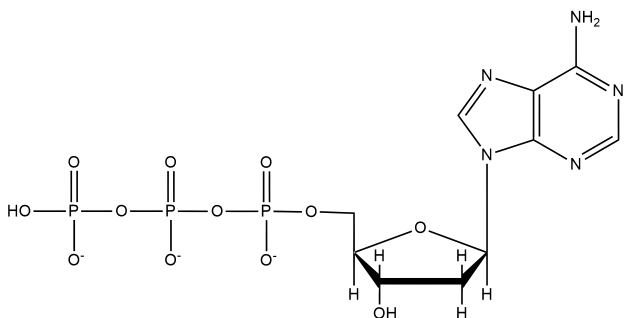
Concentration: 1 mM water solution (NH<sub>4</sub><sup>+</sup> salt)

Purity: HPLC  $\geq 96\%$

Storage conditions:  $-20^{\circ}C$

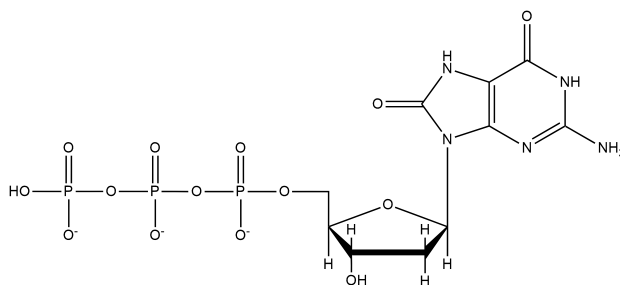
| Name         | Cat. #   | Vol.        |
|--------------|----------|-------------|
| Tamra-5-dUTP | N-900100 | 100 $\mu$ l |
|              | N-901000 | 1 ml        |

## ddNTPs – 2',3'-Dideoxynucleoside-5'-triphosphates



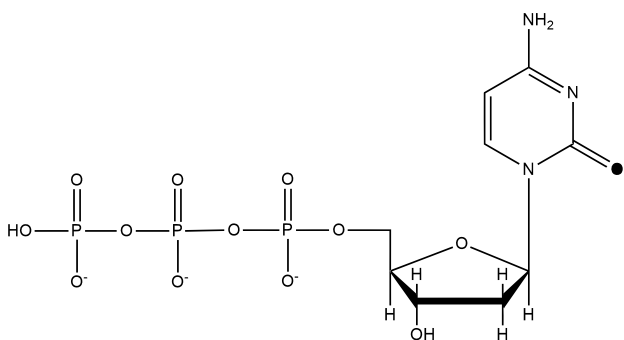
**ddATP**

Formula:  $C_{10}H_{16}N_5O_{11}P_3$   
Molecular Weight (MW): 475.18 (free acid)



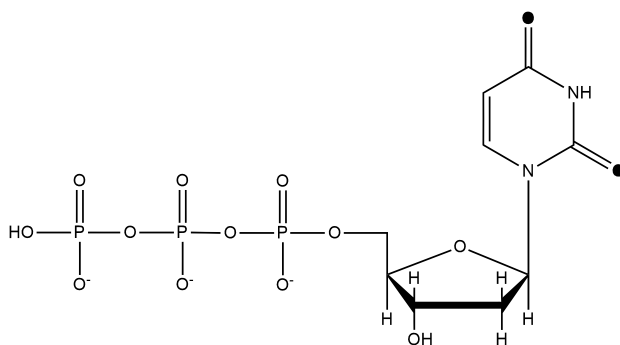
**ddGTP**

Formula:  $C_{10}H_{16}N_5O_{12}P_3$   
Molecular Weight (MW): 491.18 (free acid)



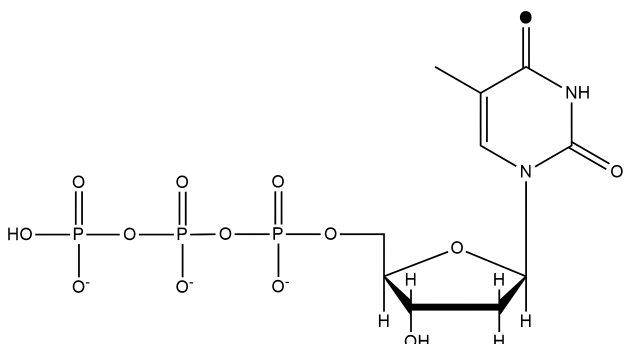
**ddCTP**

Formula:  $C_9H_{16}N_3O_{12}P_3$   
Molecular Weight (MW): 451.10 (free acid)



**ddUTP**

Formula:  $C_9H_{15}N_2O_{13}P_3$   
Molecular Weight (MW): 452.14 (free acid)



**ddTTP**

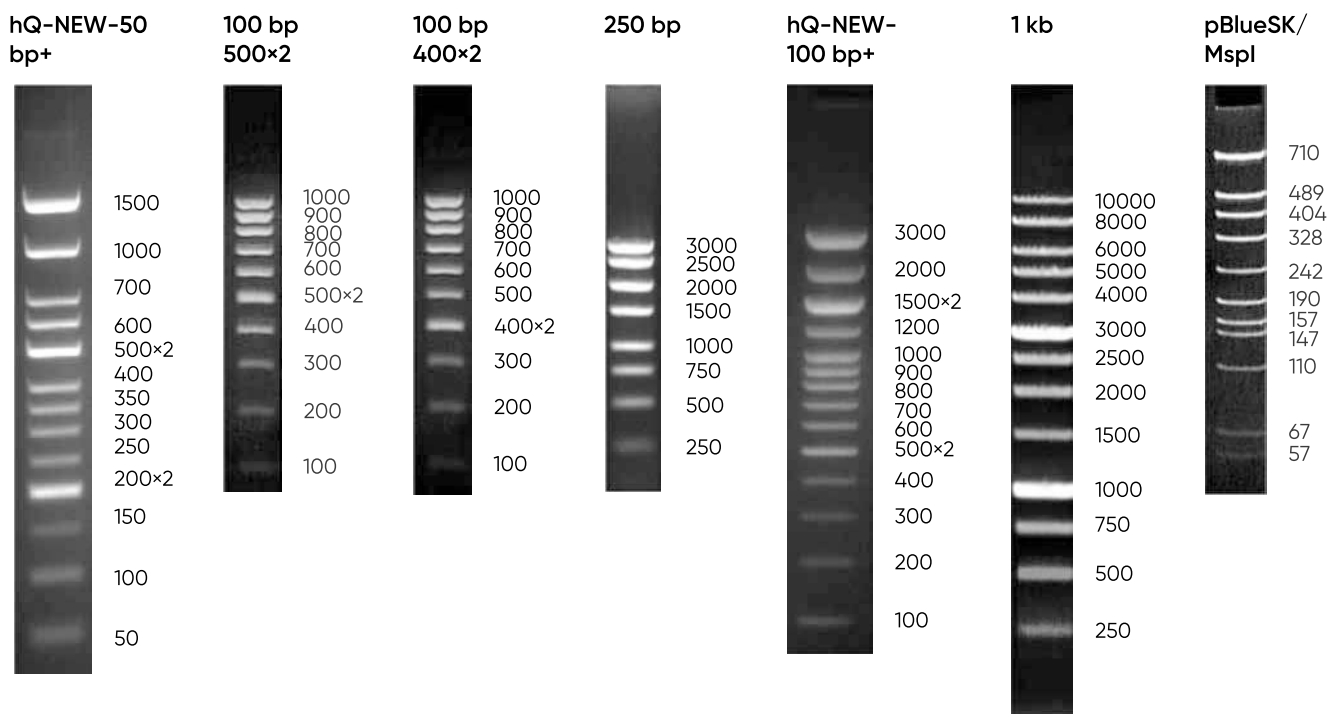
Formula:  $C_{10}H_{17}N_2O_{13}P_3$   
Molecular Weight (MW): 466.10 (free acid)

| Name  | Cat. #   | Vol.   |
|-------|----------|--------|
| ddATP | N-620100 | 100 µl |
|       | N-621000 | 1 ml   |
| ddGTP | N-630100 | 100 µl |
|       | N-631000 | 1 ml   |
| ddCTP | N-650100 | 100 µl |
|       | N-651000 | 1 ml   |
| ddUTP | N-640100 | 100 µl |
|       | N-641000 | 1 ml   |
| ddTTP | N-660100 | 100 µl |
|       | N-661000 | 1 ml   |



# DNA ladders

| Name   | Cat. #    | Qty     |
|--|-----------|---------|
| <b>hQ-NEW-50 bp+</b><br>Includes 13 fragments: 50, 100, 150, 200, 250, 300, 350, 400, 500, 600, 700, 1000 и 1500 bp.<br>The 200 and 500 base pair bands have increased intensity to serve as reference points. | MD-50250  | 0,25 mg |
| <b>100 bp (500×2)</b><br>Includes 10 fragments: 100, 200, 300, 400, 500, 600, 700, 800, 900, 1000 bp.<br>The 500 bp band has increased intensity to serve as reference point.                                  | MD-102250 | 0,25 mg |
| <b>100 bp (400×2)</b><br>Includes 10 fragments: 100, 200, 300, 400, 500, 600, 700, 800, 900, 1000 bp.<br>The 400 bp band has increased intensity to serve as reference point.                                  | MD-100250 | 0,25 mg |
| <b>250 bp</b><br>Includes 8 fragments: 250, 500, 750, 1000, 1500, 2000, 2500, 3000 bp  | MD-70250  | 0,25 mg |
| <b>hQ-New-100 bp+</b><br>Includes 14 fragments: 100, 200, 300, 400, 500, 600, 700, 800, 900, 1000, 1200, 1500, 2000, 3000 bp.<br>The 500 and 1500 bp band has increased intensity to serve as reference point. | MD-40250  | 0,25 mg |
| <b>1 kb</b><br>Includes 13 fragments: 250, 500, 750, 1000, 1500, 2000, 2500, 3000, 4000, 5000, 6000, 8000, 10000 bp.<br>The 1000 and 3000 bp band has increased intensity to serve as reference point.         | MD-60250  | 0,25 mg |
| <b>pBlueSK/Mspl</b><br>Includes 13 fragments: 710, 489, 404, 328, 242, 190, 157, 147, 110, 67, 57, 34, 24.<br>Convenient for detecting the length of dsDNA in the range from 24 to 710 bp.                     | MD-30250  | 0,25 mg |



## Immunochemical reagents

### Monoclonal antibodies (MABs)

Features: MABs are produced by mouse hybride cell lines in vivo and purified by protein A affinity chromatography.  
Prices are per 1 mg of MABs ex works Novosibirsk. Minimal pack - 2 mg. Production of other MABs is possible by request.

| Name  | Cat. # | Qty       |
|---|--------|-----------|
| Envelope protein E of TBEV, clone 14D5, isotype IgG         | I-1007 | min. 2 mg |
| Envelope protein E of TBEV, clone 1B1, isotype IgG1         | I-1020 | min. 2 mg |
| HbsAg (all subtypes), clone HV-101, isotype IgG2b           | I-1002 | min. 2 mg |
| HBsAg (all subtypes), clone HV-42, isotype IgG1             | I-1001 | min. 2 mg |
| HBsAg (subtype ad), clone HV-34, class IgG                  | I-1004 | min. 2 mg |
| Human IgG, clone X-53, isotype IgG1                         | I-1012 | min. 2 mg |
| Human IgM, clone N17, isotype IgG1                          | I-1015 | min. 2 mg |
| Ig, Human (IgG+IgM+IgA), clone L-5, isotype IgG1            | I-1013 | min. 2 mg |
| IgG, goat, clone R-7, subtype IgG1                          | I-1024 | min. 2 mg |
| Nonstructural protein NS1 of TBEV, clone 29G9, isotype IgG1 | I-1021 | min. 2 mg |
| Nonstructural protein NS1 of TBEV, clone 4C4, class IgE     | I-1008 | min. 2 mg |
| Nonstructural protein NS3 of TBEV, clone 18B2, isotype IgG1 | I-1009 | min. 2 mg |
| Nonstructural protein NS5 of TBEV, clone 23G2, isotype IgG1 | I-1010 | min. 2 mg |
| Rabbit Ig (IgG+IgM+IgA), clone RAB-02, isotype IgG1         | I-1017 | min. 2 mg |
| Rabbit IgG, clone RAB-06, isotype IgG1                      | I-1016 | min. 2 mg |

## Affinity-purified Antibodies (AAABs)

Features: AfABs to human and animal Ig are developed in rabbit or goat using high purified proteins as immunogens. AfABs are isolated from antiserum using antigens immobilized on sepharose CL-4B. AfABs to human and animal Ig are developed in rabbit or goat using high purified proteins as immunogens. AfABs are isolated from antiserum using antigens immobilized on sepharose CL-4B. Cross-reactivity antibody are removed by solid-phase immunoadsorption. Some AfABs preparations are additionally fractionated by affinity: they consist of only high- or low affinity AfABs fraction. These products are supplied in 0,02M phosphate buffered saline, pH 7,3, with sodium azide as preservative.

| Name  | Cat. # | Qty       |
|---|--------|-----------|
| Alpha-fetoprotein, human, absorbed on human serum proteins (from goat)  | I-2027 | min. 2 mg |
| HBsAg (from human plasma), absorbed on human serum proteins, fraction of high affinity antibody (from rabbit)               | I-2029 | min. 2 mg |
| Ig (IgG+IgM+IgA), Human (Fab-specific), absorbed on mouse serum proteins, fraction of high affinity antibody (from rabbits) | I-2010 | min. 2 mg |
| Ig (IgG+IgM+IgA), Human (Fab-specific), fraction of high affinity antibody (from rabbits)                                   | I-2036 | min. 2 mg |
| IgG, bovine, (whole molecule), (from rabbits)   | I-2021 | min. 2 mg |
| IgG, Human (Fc-specific), absorbed on mouse serum proteins, fraction of high affinity antibody (from goats)                 | I-2032 | min. 2 mg |
| IgG, Human (Fc-specific), absorbed on mouse serum proteins, fraction of high affinity antibody (from rabbits)               | I-2003 | min. 2 mg |
| IgG, Human (Fc-specific), fraction of high affinity antibody (from goats)   | I-2031 | min. 2 mg |
| IgG, Human (Fc-specific), fraction of high affinity antibody (from rabbit)  | I-2030 | min. 2 mg |
| IgG, mouse (Fc-specific), absorbed on human serum proteins, fraction of high affinity antibody (from rabbits)               | I-2014 | min. 2 mg |
| IgG, mouse (whole molecule), absorbed on human serum proteins, fraction of high affinity antibody (from rabbits)            | I-2037 | min. 2 mg |
| IgG, sheep, (whole molecule), (from rabbits)  | I-2020 | min. 2 mg |
| IgM, Human (monospecific), absorbed on mouse serum proteins, fraction of high affinity antibody (from goats)                | I-2035 | min. 2 mg |
| IgM, Human (monospecific), absorbed on mouse serum proteins, fraction of high affinity antibody (from rabbits)              | I-2007 | min. 2 mg |
| IgM, Human (monospecific), fraction of high affinity antibody (from goats)  | I-2034 | min. 2 mg |
| IgM, Human (monospecific), fraction of high affinity antibody (from rabbit)   | I-2033 | min. 2 mg |

## Horseradish peroxidase and biotin conjugates

| Name  | Cat. # | Qty       |
|---|--------|-----------|
| Envelope protein E of TBEV, monoclonal antibody 14D5 [1], isotype IgG1  | I-3018 | min. 2 mg |
| Ig (IgG+IgM+IgA), Human (monospecific), absorbed on mouse serum proteins, fraction of high affinity antibody (from rabbits) | I-3008 | min. 2 mg |
| Ig (IgG+IgM+IgA), Human, monoclonal antibody L-5, isotype IgG1  | I-3023 | min. 2 mg |
| IgG, Bovine, (whole molecule), fraction of high affinity antibody (from rabbits)  | I-3026 | min. 2 mg |
| IgG, Goat, monoclonal antibody R-7, isotype IgG1  | I-3024 | min. 2 mg |
| IgG, Human (Fc-specific), absorbed on mouse serum proteins, fraction of high affinity antibody (from rabbits)               | I-3003 | min. 2 mg |
| IgG, Human, monoclonal antibody X-53, isotype IgG1  | I-3021 | min. 2 mg |
| IgG, mouse (Fc-specific), absorbed on human serum proteins, fraction of high affinity antibody (from rabbits)               | I-3011 | min. 2 mg |
| IgG, mouse (whole molecule), absorbed on human serum proteins, fraction of high affinity antibody (from rabbits)            | I-3009 | min. 2 mg |
| IgG, Rabbit, monoclonal antibody RAB-02, isotype IgG1   | I-3020 | min. 2 mg |
| IgG, Sheep, (whole molecule), fraction of high affinity antibody (from rabbits)   | I-3025 | min. 2 mg |
| IgM, Human (monospecific), absorbed on mouse serum proteins, fraction of high affinity antibody (from rabbits)              | I-3006 | min. 2 mg |
| IgM, Human, monoclonal antibody N-17, isotype IgG1  | I-3022 | min. 2 mg |
| Protein A Staphylococcus aureus   | I-3016 | min. 2 mg |

## Immunsorbents

Sorbents are prepared on the base of BrCN-Sepharose CL 4B (or Sepharose 4B) and highly purified Ig. Sorbents contain 5 to 15 mg of immobilized proteins pro 1 ml of gel, except Protein A – Sepharose (content is 3 mg/ml).

| Name  | Cat. # | Qty       |
|---|--------|-----------|
| Anti-HBsAg, affinity purified antibody, absorbed on human serum proteins, (from rabbit)                                 | I-4028 | min. 2 mg |
| Anti-HbsAg, monoclonal antibody HV-42 (subtype IgG1)  | I-4027 | min. 2 mg |
| Human IgG   | I-4003 | min. 2 mg |
| Mouse IgG   | I-4008 | min. 2 mg |
| Protein A from Staphylococcus aureus (binding capacity – 18-30 mg of Human IgG or 2-6 mg of Mouse IgG1 pro 1 ml of gel) | I-4002 | min. 2 mg |

## Contacts

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