Easy-to-Handle and Safe Phosphitylation Reagent for DNA and RNA Fragment Synthesis

**Advantage**

- More thermally-stable and easier to handle than other phosphitylation reagents

Protected 2'-deoxyribo and ribonucleoside-3'-phosphoramidites, which have been widely used for syntheses of DNA and RNA fragments, are prepared from \( N,O \)-diprotected nucleosides and a phosphitylation reagent with an activator such as 1H-tetrazole. **C2228** has been the reagent of frequent choice for phosphitylation due to its ease in handling and safety.1)

---

1) Synthesis of protected nucleoside-3'-phosphoramidites using **C2228**


---

**Related Products**

**N,O-Protected nucleosides for DNA and RNA fragment synthesis:**

**B3087** 1\( N^4 \)-Benzyol-5'-O-(4,4'-dimethoxytrityl)-2'-deoxycytidine (Bz-DMT-dC) 1g / 5g

**D3566** 5'-O-(4,4'-Dimethoxytrityl)thymidine (DMT-T) 5g / 25g

**B3103** 1\( N^6 \)-Benzyol-5'-O-(4,4'-dimethoxytrityl)-2'-deoxyadenosine (Bz-DMT-dA) 100mg / 1g

**I0697** 1\( N^2 \)-Isobutyryl-5'-O-(4,4'-dimethoxytrityl)-2'-deoxyguanosine (iBu-DMT-dG) 1g / 5g

**Activators:**

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

**B3020** 5-(Benzythio)-1H-tetrazole 25g

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

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

---

**Easy-to-Handle and Safe Phosphitylation Reagent for DNA and RNA Fragment Synthesis**

**C2228** 2-Cyanoethyl \( N,N',N',N'' \)-Tetraisopropylphosphordiamidite 1g / 5g

---

**Ordering and Customer Service**

**TCI EUROPE N.V.**
Tel : +32 (0)3 735 07 00
Fax : +32 (0)3 735 07 01
E-mail : Sales-EU@TCIchemicals.com

**Tokyo Chemical Industry UK Ltd.**
Tel : +44 (0)1865 784560
Fax : +44 (0)1865 784561
E-mail : Sales-UK@TCIchemicals.com

**TCI North America**
Tel : 800-423-8616 / 503-283-1681
Fax : 888-520-1075 / 503-283-1987
E-mail : Sales-US@TCIchemicals.com

**TCI Chemicals (India) Pvt. Ltd.**
Tel : +91 11 425 7889 / 044-2262 0909
Fax : 044-2262 8902
E-mail : Sales-IN@TCIchemicals.com

**Tokyo Chemical Industry Co., Ltd.**
Tel : +81 (0)3-5640-8878
Fax : +81 (0)3-5640-8902
E-mail : globalbusiness@TCIchemicals.com

www.TCIchemicals.com