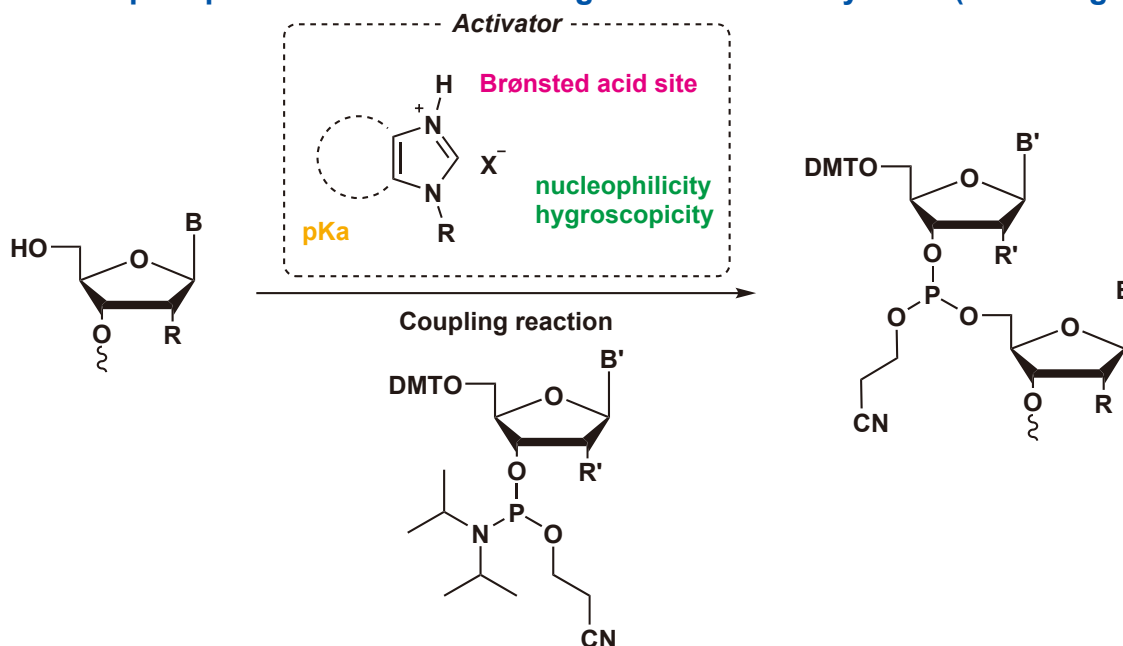
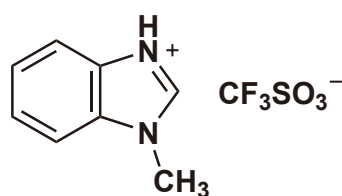


Coupling Activators for Oligonucleotide Synthesis

Phosphoramidite chemistry using coupling activators has become dominant in the oligonucleotide synthesis due to its high coupling efficiency and rapid turnaround time. TCI provides a lineup of variety of modified activators, including imidazolium salts with different acidities, which can be to strike a good balance between the activation of phosphoramidite and reducing undesired detritylation (de-DMT group).



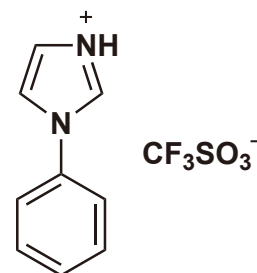
Imidazolium Salt-type Coupling Activators



1-Methyl-1H-benzimidazol-3-ium
Trifluoromethanesulfonate
(= N-MeBIT)

5g / 25g

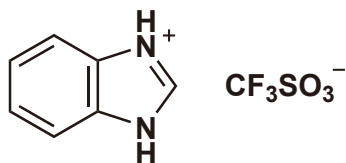
New [M3384]



1-Phenyl-1H-imidazol-3-ium
Trifluoromethanesulfonate
(= N-PhIMT)

5g / 25g

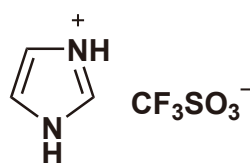
New [P2822]



1H-Benzimidazol-3-ium
Trifluoromethanesulfonate
(= BIT)

1g / 10g

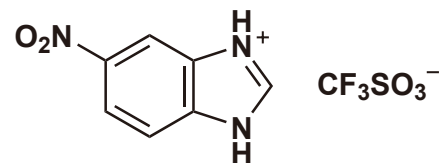
New [B6330]



1H-Imidazol-3-ium
Trifluoromethanesulfonate
(= IMT)

1g / 10g

New [I1157]



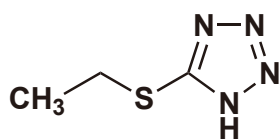
5-Nitro-1H-benzimidazol-3-ium
Trifluoromethanesulfonate
(= NBT)

1g / 10g

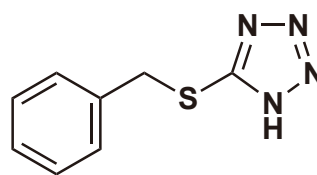
New [N1214]

Coupling Activators for Oligonucleotide Synthesis

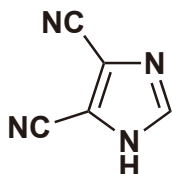
Tetrazole/Imidazole-type Coupling Activators



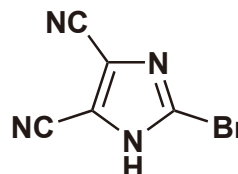
5-(Ethylthio)-1H-tetrazole
(= ETT)
1g / 5g
[E0670]



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

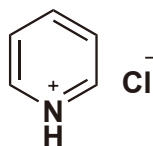


4,5-Dicyanoimidazole
(= DCI)
25g / 250g
[D2026]

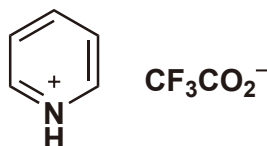


2-Bromo-4,5-dicyanoimidazole
(= Br-DCI)
1g / 5g
New [B6329]

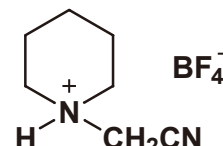
Pyridinium/Piperidinium Salt-type Coupling Activators



Pyridinium Chloride
(= Py-HCl)
25g / 100g / 500g
[P1637]



Pyridinium Trifluoroacetate
(= Py-TFA)
5g / 25g
New [P2920]



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

References

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<https://doi.org/10.1021/ja010078v>

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