

Nco I

Cat# RE0047/ RE0047L

store at -20°C.

INFORMATION

Product Name	Nco I												
Cat NO.	RE0047/RE0047L												
Size	1,000 unit / 5,000 units												
Concentration	20,000 units/ml												
Recognition site	C↓CATGG GGTAC↑C												
Source	Bacillus species 19												
Enzyme activity (%)	<table border="1"> <thead> <tr> <th>B</th> <th>G</th> <th>O</th> <th>W</th> <th>Y</th> <th>ROSE</th> </tr> </thead> <tbody> <tr> <td>0-10</td> <td>100</td> <td>0-15</td> <td>25-50</td> <td>100</td> <td>100</td> </tr> </tbody> </table>	B	G	O	W	Y	ROSE	0-10	100	0-15	25-50	100	100
B	G	O	W	Y	ROSE								
0-10	100	0-15	25-50	100	100								
Reaction Conditions	1X Buffer Y, BSA (100 µg/ml). Incubate at 37 oC												
1X SE-Buffer Y	Y (33 mM Tris-acetate (pH 7.9 at 25°C); 10 mM magnesium acetate; 66 mM potassium acetate; 1 mM DTT.)												
Heat Inactivation	Enzyme is inactivated by incubation at for 20 minutes.												
Optimal temperature	37oC												
Unit Definition	One unit is defined as the amount of enzyme required to digest 1 µg of Lambda DNA in 1 hour at in a total reaction volume of 50 µl. To obtain 100% activity, BSA should be added to the 1x reaction mix to a final concentration of 100 µg/ml												
Quality Control Assays : Ligation	After 20-fold overdigestion with Nco I, 95% of the DNA fragments can be ligated and recut.												
16-Hour Incubation	A 50 µl reaction containing 1 µg of DNA and 40 Units of enzyme incubated for 16 hours resulted in the same pattern of DNA bands as a reaction incubated for 1 hour. No using BSA for long incubation												
Oligonucleotide Assay	No detectable degradation of a single-stranded and double-stranded oligonucleotide was observed after incubation with 20 units of restriction endonuclease for 3 hours.												
Enzyme Properties	When using a buffer other than the optimal (Supplied) Buffer, it may be necessary to add more enzymes to achieve complete digestion												
Reagents Supplied with Enzyme	10X Buffer Y, BSA (10 mg/ml)												
<p>NcoI cuts hemi methylated site 5`-(5mC) CATGG-3`/3`-GGTACC-5` and doesn't cut methylated sites 5`-(5mC) CATGG-3`/3`-GGTAC(5mC)-5` and 5`-(4mC) CATGG-3`/3`-GGTAC(4mC)-5`</p>													

