

5'...▼GATC...3'
 3'...CTAG▲...5'

Content:	Ref No.	250120S	color
Mbol 10 U/μL		300 units	blue
10x buffer U _{Mbol} *		1x 1 mL	red
10x buffer EQ		1x 1 mL	yellow
Datasheet			



Lambda DNA Mbol digest, 1.4 % agarose

We recommend the use of buffer EQ as universal buffer.

Storage: -20 °C

Concentration: 10 U/μL

Source: Mbol is a restriction enzyme purified from *Moraxella bovis* (ATCC 10900).

Enzyme Properties:

1x buffer U_{Mbol} composition: 10 mM Tris-HCl (pH 8.0 at 25 °C), 100 mM KCl, 10 mM MgCl₂, 100 μg/ml BSA.

General reaction mixture:

10 U Mbol	1 μL
10x buffer U _{Mbol} * or K	2 μL
DNA substrate	<1 μg
Sterile ultrapure water	Up to 20 μL

Incubate for 15 min at 37 °C

Heat inactivation: 65 °C for 20 minutes.

Methylation Sensitivity:
dam methylation: Blocked
dcm methylation: Not sensitive
 CpG methylation: Impaired by overlapping

Storage buffer: 10 mM Tris-HCl (pH 7.4), 50 mM KCl, 0.1 mM EDTA, 1 mM Dithiothreitol, 200 μg/ml BSA and 50 % glycerol. Store at -20 °C.

Absence of contaminants: 20 units of Mbol do not produce any unspecific cleavage products after 16 hrs incubation with 1 μg of Lambda DNA (*dam*⁻) at 37 °C. After 10-fold overdigestion with Mbol, greater than 95 % of the DNA fragments can be ligated and recut with this enzyme.

Unit definition: One unit is defined as the amount of enzyme required to produce a complete digest of 1 μg Lambda DNA in 60 minutes in a total reaction volume of 0.05 mL under assay conditions.

Frequency of Cutting:

λ	Ad-2	Φx174	pUC18	M13mp18	pBR322
116	87	0	15	7	22

Percent Activity in BIORON Buffers:

R1	R2	R3	R4	EQ
50-100	50-100	50-100	50	100