

RapidDigest MboII

Cat No.	Digestion site	Quantity	Isoschizomer
RD1181	5'G A A G A (N) ₈ ↓3' 3'C T T C T (N) ₇ ↑5'	25µl (1RDU/µl)	-
Source:	Incubation	Inactive	Active site on λ DNA

Supplied with: 125µl of 10X RD Universal Buffer, 50µl 10X RD Blue Buffer

Store at -20°C, avoid frequent thawing and freezing.

For in vitro use only

All RapidDigest Restriction Enzymes is completely active in Universal RD Buffer and digest DNA in 15-30 minutes or less.

RD restriction enzyme also eliminates need for sequential digestion during double digest methods.

Recommended assay

1-Add below materials to 0.5ml tube:

	Plasmid/ Lambda DNA	PCR product	Genomic DNA
Water DNase free	15ul	17ul	30ul
10X RapidDigest Buffer	2ul	2ul	5ul
DNA	2ul (up to 1ug)	10ul (_0.2ug)	10ul (5ug)
RapidDigest Enzyme	1ul(1 RDU)	1ul(1 RDU)	5ul(5 RDU)
Total Volume	20ul	30ul	50ul

2- Mix gently and spin down.

3- Incubate at 37°C for 15-30 minutes¹.

4- Inactive the enzyme by heating for 20 min at $65^{\circ}C^{2}$.

1. Time of incubation may need to optimization but it could be achieved between 5 to 30 minutes. For digestion of difficult to cleave-DNA, incubation time may extend to one hour.

2. There are some alternative ways to stop the reaction:

- Addition of EDTA pH 8.0 <0.5M> final 20mM.
- Spin column DNA purification.
- Agarose gel extraction.
- Phenol- Chloroform extraction.
- Ethanol precipitation.



دفته فروش و تولید : کیلومت ۲۴ جاده مخصوص کرچ، گرمدره، نبش خیابان تاجبخش، مجت مع زیست دارویی آریـوژن کــدپستی: ۲۱۶۴۸۱۹۷۱ تلفــن:۶-۲۶۱۰۶۴۱۰۶۴۸۰ ۴۲،۰۲۶ ۲۶۱۰۹۲۰ فکس:۲۶۳۶۱۰۶۴۸



Ligation and recutting:

After 5-fold over digestion with, >95% of the DNA fragments can be ligated and recut with this enzyme.

DNA Methylation:

No Inhibition: CpG, dcm Inhibition (Impaired by overlapping): dam

Unit Definition:

One RapidDigest Unit (1 RDU) equal $5u/\mu l$ is the amount of enzyme required to completely digest $1\mu g$ of Lambda DNA in 15-30 minute in 1X RapidDigest buffer.

Quality Control:

All preparations are assayed for contaminating endonuclease, 3'-exonuclease, 5'-exonuclease/ 5'-phosphatase, as well as nonspecific single and double stranded DNase activities.

For double digestion simply add 1ul of each enzyme and scale up the reaction. For different temprature reaction start of the enzymes that requires lower temprature.

λ DNA used as substrate for unit definition and quality control tests.



دفته فروش و توليد : كيلومت ۲۶ جاده مخصوص كرج، گرمدره، نبش خيابان تاجبخش، مجتمع زيست دارويي آريوژن كديستي ۱۰ ۱۹۶۸،۱۹۷۱ تلفن: ۶-۲۶، ۶۶۱۰ ۶۶۱۰ ۷۲۴ ۲۶۰۰ ۷۲۴ ۲۶۱۰ فكس ۲۶،۷۶۷ ۲۶۱۰

 Sale office and production facility: Tajbakhsh St. 24th Km Karaj Makhsous Rd, AryoGen Biopharma Complex. Karaj, Iran

 Post code: 3164819711
 Tel: +98 (0)26 3610 6485-6,+98 (0) 26 3610 7240-43, Fax: +98(0)26 3610 6487

 Email:order@sinaclon.com
 www.sinaclon.com



Ligation and recutting:

After 5-fold over digestion with, >95% of the DNA fragments can be ligated and recut with this enzyme.

DNA Methylation:

No Inhibition: CpG, dcm Inhibition (Impaired by overlapping): dam

Unit Definition:

One RapidDigest Unit (1 RDU) equal $5u/\mu l$ is the amount of enzyme required to completely digest $1\mu g$ of Lambda DNA in 15-30 minute in 1X RapidDigest buffer.

Quality Control:

All preparations are assayed for contaminating endonuclease, 3'-exonuclease, 5'-exonuclease/ 5'-phosphatase, as well as nonspecific single and double stranded DNase activities.

For double digestion simply add 1ul of each enzyme and scale up the reaction. For different temprature reaction start of the enzymes that requires lower temprature.

λ DNA used as substrate for unit definition and quality control tests.



دفتر فروش و تولید: کیلومتر ۲۴ جاده مخصوص کرج، گرمدره، نبش خیابان تاجبخش، مجتمع زیست دارویی آریوژن کدپستی:۳۱۶۴۸۱۹۷۱ تلفن:۹۶۸۵-۶۶۳۶۱۰ ۲۴،۰۲۶۳۶۱۰ ۲۶۴۸۹۰ فکس:۲۶۳۶۱۰ ۶۴۸۷