

5'...GT<sup>▼</sup>AC...3'  
 3'...CA<sup>▲</sup>TG...5'

Content:	Ref No.	250129S	color
Rsal 10 U/μL		1000 units	blue
10x buffer M*		1x 1 mL	red
10x buffer K		1x 1 mL	yellow
Datasheet			



Lambda DNA Rsal  
 digest, 1.4 % agarose

We recommend the use of buffer K as universal buffer (BSA included).

**Storage:** -20 °C

**Concentration:** 10 U/μL

**Source:** Rsal is a restriction enzyme purified from *Rhodopseudomonas sphaeroides*

#### Enzyme Properties:

**1x buffer M composition:** 10 mM Tris-HCl (pH 7.9 at 25 °C), 50 mM NaCl, 10 mM MgCl<sub>2</sub>, 1 mM Dithiothreitol

**General reaction mixture:**

10 U Rsal	1 μL
10x buffer M* 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: Not sensitive  
*dcm* methylation: Not sensitive  
 CpG methylation: Blocked by some combinations of 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.

**Absence of contaminants:** 400 units of Rsal do not produce any unspecific cleavage products after 16 hrs incubation with 1 μg of λ-DNA at 37 °C. After 10-fold overdigestion with Rsal, 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
	113	83	11	3	19	3
Percent Activity in BIORON Buffers:	L*	M*	H*	SH*	A*	K
	75-100	100	50	<10	<10	100

\*we recommend the addition of BSA to a final concentration of 100 μg/mL.

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