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RsaI

Product Number: RS03

Shipping and Storage

-20℃

Components

Component	RS03
RsaI (10U/μl)	200U
10×Buffer Y	1ml

Description

The RsaI endonuclease is imported and packaged, with the following basic information:

recognition sequence	Buffer Compatibility (%)						Enzyme digestion temperature	Deactivation conditions	Methylation interference?
GT^AC	1×B	1×G	1×O	1×R	1×Y	2×Y	37°C	65°C	Sometimes
CA^TG	50-100	20-50	0-20	0-20	100	0-20		20min	

According to the differences in adjacent sequences identified, the enzymatic cleavage effect is influenced by DNA methylation caused by CG methylase.

Enzymatic cleavage and ligation efficiency: When digested with 50 times excess endonuclease for 1 hour,>95% of the cleaved fragments can be cleaved and re cleaved (regret).

Unit definition

1U:The enzyme that completely decomposes 1μg of DNA in a 50μl reaction system of 37°C for 1 hour.

Storage buffer

1. The enzyme storage solution group consisted of 10mM Tris HCl (pH7.4 at 25°C), 50mM NaCl, 1mM DTT, 1mM EDTA, 0.2mg/ml BSA, and 50% glycol.
2. 1×Buffer Y group consisted of 33mM Tris acetate (pH7.9 at 37°C), 10mM magnesium acetate, 66mM Potassium acetate, and 0.1mg/ml BSA.

Note

1. Endonucleases should be stored in an ice box or ice bath when used, and should be immediately stored at -20°C after use.
2. If it is found that the expected cleavage site cannot be cleaved, please confirm whether there is a methylation interference issue.
3. This product is only for scientific research purposes by professionals and cannot be used for clinical diagnosis or treatment, food or medicine, or stored in ordinary residential areas.
4. For your safety and health, please wear laboratory clothes and disposable gloves when operating.

Protocol

1. When performing single enzyme digestion, the following reaction system can be referred to:

DNA to be digested by enzymes	≤1μg
Double steamed water or Milli-Q water	Appropriate amount
10×Buffer Y	2μl
RsaI	0.5-1μl
Total	20μl

Incubate at 37°C for 1 hour or longer

Note:Please make sure to mix the buffer and water thoroughly before adding endonuclease. After adding endonuclease, you can use a gun to blow or gently Vortex to mix well. Usually, incubating for 1 hour under the above conditions is sufficient, but incubating for a few more hours or even overnight will not have a negative impact. If the enzyme is digested for a long time or even overnight, a smaller amount of enzyme can be used. When the amount of DNA digested is large, the digestion time can be appropriately extended or the digestion system can be scaled up proportionally.

2. When performing double or multi enzyme digestion, it is necessary to select an appropriate buffer that is compatible with two or more endonucleases, and then refer to the above table to set up the reaction system. If there is no suitable buffer to choose from, purification can be carried out after one enzyme digestion is completed, and another enzyme digestion reaction can be carried out after purification.