

Product Description

This product, BspQ I GMP-Grade, is a type IIS restriction endonuclease derived from an *E. coli* strain carrying the BspQ I gene cloned from *Bacillus sphaericus*. Its recognition and cleavage sequence is as follows:

5' ...GCTCTTC(N) ↓ ...3'

3' ...CGAGAAG(NNNN) ↑ ...5'

Components

Components	GMP-BP-E09-1K	GMP-BP-E09-10K	GMP-BP-E09-100K
	1 KU	10 KU	100 KU
BspQ I GMP-grade	0.1 mL	1 mL	10 mL
10×BspQ I Reaction Buffer	1 mL	5 mL	50 mL

Storage

Store at -20±5°C

Product Information

Product Name	BspQ I GMP-grade
Activity	10 U/μL
Unit Definition	One unit(U) is defined as the amount of enzyme required to digest 1 μg of λ DNA in 1 hour at 50°C.
Storage Buffer	20 mM Tris-HCl,500 mM KCl,0.1 mM EDTA,1 mM DTT, 0.1% TritonX-100(v/v),500μg/mL HSA,50% Glycerol(v/v),pH7.0 at 25°C.

Quality control

1. Solution appearance: clear and transparent, free of visible particulate matter.
2. Activity>10 U/μL.
3. Protein purity≥95%.
4. Free of exogenous DNase, RNase, exonuclease, and endonuclease activity.
5. Residual host-cell DNA: ≤100 pg/mg.
6. Residual host-cell protein: <50 ppm.
7. Heavy metals<10 ppm.
8. HBV, HCV, HIV, and mycoplasma: not detected.
9. Bacterial endotoxin: <5 EU/mL.
10. pH 6.5-8.5.

Recommended Digestion System:

Components	Volume
10×BspQ I Reaction Buffer	5 μL
BspQ I GMP-grade	1 μL
DNA Template	1 μg
ddH ₂ O	To 50 μL

Reaction Programe:50°C for 1h.

Inactivation:80°C for 20min .

Application

1. Digesting plasmids to prepare linearized DNA fragments with poly(A/T/G/C) ends.
2. Digesting DNA to obtain specific sticky ends.

Notes

1. Final restriction digest content is no more than 1/10 of total reaction volume.
2. Prepare reaction mix on ice.
3. Please thaw and mix thoroughly before use. Avoid repeated freezing and thawing.