Hind III

A^AGCTT

AccuCut™ *Restriction Endonuclease*

- **Cat. No.** **E-1721** **10000 Units**
  E-1722 **50000 Units**
- **Lot No. : 0803E**
- **Supplied with Enzyme**

10X	**AccuCut™ Blue Buffer**	**: 1 mL**
	100 mM	pH 8.5 Tris-HCl
	100 mM	$MgCl_2$
	1 M	NaCl
	10 mM	DTT
1X Dilution Buffer		**: 1 mL**
	10 mM	pH 7.6 Tris-HCl
	50 mM	KCl
	0.1 mM	EDTA
	1 mM	DTT
	200 μ g/mL	Acetylated BSA
	50%	Glycerol

- **Store at -20℃.**

- **Unit definition** : One unit of restriction endonuclease activity is defined as the amount of enzyme required to completely digest 1μg of substrate DNA in a total reaction volume of 50 μL in one hour using the AccuCut™ buffer provided. Incubations are performed in 1.5 mL tubes at the appropriate incubation temperature as indicated in the Product Profile.

- **Isoschizomer** :*Bst*F I,*Eco*V III,*Hsu* I,*Ssb* I.

- **Neoschizomer** :Unfound

- **Reactivity on methylated substrate DNA:** Blocked by AAG^{hm5}CTT, AAG^{m5}CTT, ^{m6}AAGCTT. Not blocked by AAGC^{hm5}U^{hm5}U, A^{m6}AGCTT.

- **Ref**) *1.Old, R., Murray, K., Roizes, G., (1975) J. Mol. Biol., vol. 92, pp. 331-339.*
  2.Roy, P.H., Smith, H.O., (1973) J. Mol. Biol., vol. 81, pp. 427-444.
  3.Roy, P.H., Smith, H.O., (1973) J. Mol. Biol., vol. 81, pp. 445-459

- **Source :** ***Haemophilus influenzae* Rd.**
- **Concentration : 20 Units/μL**
- **Reaction Condition**
  - 10X AccuCut™ **B**lue Buffer
  - **Incubate at 37℃.**
- **Storage Buffer**

20 mM	pH 7.5, Tris-HCl
300 mM	KCl
1 mM	EDTA
10 mM	2-mercaptoethanol
50%	Glycerol

- **Heat inactivation :** No.

Quality Control

- **Overdigestion Assay :**

No nonspecific activity was detected after incubation of 1 μg of λ DNA with 50 units of *Hind* III for 15 hours.

* Conditions of low ionic strength, high enzyme concentration, glycerol concentration >5%, or pH >8.0 may result in star activity.

- **Nuclease Contamination Assay :**

No altered pattern was detected after incubation of 1 μg of substrate DNA with *Hind* III in 50 μL reaction volume with the supplied AccuCut™ buffer overnight.

- **Ligation and Recutting Assay :**

This assay is used to test for exonuclease activity that would degrade the termini of restriction fragments, resulting in inhibition of ligation and of subsequent digestion of ligated fragments. After 40-fold overdigestion with *Hind* III, 95% of the DNA fragments can be ligated and recut with *Hind* III.