DNase I Set

Product description

Bovine pancreatic deoxyribonuclease (also known as DNase) is an endonuclease. It acts on the phospholipid bond, especially the bond adjacent to pyrimidine nucleoside, so as to produce polynucleotides with free hydroxyl at the 3'end and phosphate at the 5' end. The optimum pH value of enzyme action was 7.8. DNase can be activated by divalent metals and inhibited by chelates such as EDTA and sodium dodecyl sulfate. Calcium ion with a concentration of 5 mm can be used as a stabilizer to protect DNase from being decomposed by hydrolase. This product is extracted from bovine pancreas and prepared by chromatography to remove the pollution of other hydrolases.

DNase I Set (RNase Free)is specially designed for column/magnetic bead RNA extraction kit. Biological samples were lysed, ethanol was added to adjust the binding conditions, and transferred to column or magnetic beads to adsorb RNA. After washing, add DNase I and DNase Buffer to the membrane of the column or magnetic bead, digest at room temperature (25-37℃) for 15 minutes to completely remove the DNA adsorbed on the membrane/beads, afer wash away DNase and degraded DNA, and finally remove RNA with DEPC water.

Ordering information

CAT.No.	Product Name	Size	Package
C12133	DNase I Set(10units/ul)	500 Preps	RNase-Free DNase I 5ml, DNase Buffer 60ml
C12134		5000 Preps	RNase-Free DNase I 50ml, DNase Buffer 600ml

Storage and Stability

Magen RNase-Free DNase I is stable for up to 1 year after delivery when stored at -20°C.

Column DNase Digestion protocol:

1. According to the instructions of column RNA Extraction Kit: Bind RNA on the column with lysate/ethanol mixture.
2. Wash the column with 500μl Wash Buffer 1 (Such as Buffer RW1) and centrifuge for 1 minute.
3. Add 100μl DNase Mixture (10μl RNase Free DNase I & 90μl DNase Buffer) to the column. Incubate at room temperature for 10~15 minutes to digest DNA.
4. Wash the column with another of 500μl Wash Buffer 1(Such as Buffer RW1) and centrifge for 1 minutes to wash away DNase I and digested DNA.
5. Wash the column with 500μl Wash Buffer 2(Such as Buffer RW2) and dry.
6. Elute RNA with DEPC-Treated Water.

Liquid DNase Digestion Protocol:

1. Transfer 10~100μl RNA into 1.5ml centrifuge tube, and make up to 100μl with DEPC treated water.
2. Add 100μl DNase buffer and 10μl DNase I to sample, mix well and sit at room temperature for 30 minutes.
3. DNase I was removed by extraction with phenol chloroform, column kit, or magnetic bead kit. EDTA/heating is not recommended for deactivation of this product.