

## Strep tagII Benzonase nuclease

Cat. No. STBN-001

Lot. No. (See product label)

### Introduction

**Description** Benzonase nuclease can effectively reduce the viscosity of protein samples, remove the contamination of nucleic acid in protein samples, and has no residual protease activity. The nuclease activity reaches  $1 \times 10^6$  U/mg protein. Benzonase nuclease also has many other applications, such as reducing sample processing time, increasing protein yield, more complete precipitation and supernatant separation during centrifugation, more convenient centrifugation of solution (especially ultrafiltration), and improving the efficiency of chromatographic purification. Strep tagII Benzonase nuclease can be efficiently removed by Strep Tactin XT Resin after digestion of nucleic acid.

**Applications**

1. Removal of nucleic acid contamination during protein extraction: Benzonase nuclease can effectively reduce sample viscosity and facilitate downstream operation when purifying recombinant protein or extracting protein from tissue cell samples
2. Use with cell or bacterial lysate to remove nucleic acid from crude extract, reduce solution viscosity and increase protein yield
3. Reduction of clotting of stored peripheral blood monocytes (PBMCs)
4. Degradation of nucleic acids to facilitate the preparation of high-quality inclusion bodies before renaturation of insoluble proteins
5. Effective removal of negatively charged nucleic acids on bidirectional SDS-PAGE protein samples improves protein separation and enhances 2-DE resolution
6. Removal of DNA Contamination in Vaccine and Virus Sample Preparation

### Product Information

**Unit Definition** The amount of enzyme that reduced the value of  $\Delta A_{260}$  by 1.0 (equivalent to the complete digestion of 37  $\mu$ g DNA) within 30 minutes under the reaction conditions of 37°C and pH 8.0 is defined as an active unit. Note: Crude products containing a large amount of protein, cell wall and other salts can partly inhibit the activity of the enzyme, and the amount of the enzyme needs to be increased when used.

### Storage and Shipping Information

**Storage** Stored at -20° C for 2 years.