

## Deoxyribonuclease II

**Cat:** D5220

**Specification:** 2ku /5ku

**Storage:** Store at -20°C.

### Product Information

**CAS:** 9025-64-3

**English name:** Deoxyribonuclease II

**International Systematic Classification Number:** EC: 3.1.22.1

**Optimal pH:** 5

**Isoelectric Point:** 8.1

**Molecular Formula:** C<sub>5</sub>H<sub>11</sub>NO<sub>2</sub>

**Molecular Weight:** 38 kDa

**Appearance (Character):** Solution

**Enzyme Activity/Potency:** ≥12,000 units per mg of protein

**Source:** Porcine spleen

### Introduction

Pig DNase II (pDNase II) is an acidic endonuclease widely present in animal cells. This enzyme is a glycoprotein endonuclease with a dimer structure primarily associated with lysosomes. It hydrolyzes the phosphodiester bonds of DNA under acidic conditions without requiring divalent metal ions and is important for DNA fragmentation and degradation.

**Unit Definition:** Using highly polymerized DNA as a substrate, one unit is defined as an increase in absorbance at 260 nm by 0.001 per minute at 25°C and pH 4.6.

**Inhibitors:** Actinomycin D; iodoacetate; N-bromosuccinimide and H<sub>2</sub>O<sub>2</sub>; divalent cations such as zinc and copper; sulfates; NaCl (above 250 mM); DNA (above 0.4 mg/ml), rRNA, tRNA; iodoacetamide (mild inhibition).

**Applications:** DNA fragmentation; study of apoptosis; molecular weight markers; control of antibody reactions.

### Note

1. Cultured in a medium completely devoid of animal components, designed for bioprocessing that necessitates the prevention of introducing animal-derived pathogens.
2. Unless otherwise specified, the biochemical reagents produced by our company are generally non-sterile packaged. If they are to be used for cell experiments, please conduct pretreatment in advance.
3. Once dissolved, please store the solution in separate containers to avoid product degradation caused by repeated freezing and thawing.
4. The product information is for reference only. If you have any questions, please call

400-968-6088 for consultation.

5. The products are all for scientific research use only. Do not use it for medical, clinical diagnosis or treatment, food and cosmetics, etc. Do not store them in ordinary residential areas.
6. For your safety and health, please wear laboratory clothes, disposable gloves and masks to operate.