

Product Specification Sheet

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**Human Deoxyribonuclease 1 (DNase 1) Protein**

- Cat #** DNASE15-R-100      Recombinant (CHO) human DNase I Protein for ELISA/Western, active  
**SIZE:** 100 ug
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Deoxyribonuclease I Human Recombinant (rhDNase), an enzyme which selectively cleaves DNA. Recombinant Human Dnase is an endonuclease enzyme which splits phosphodiester linkages within polynucleotides, acting primarily on single stranded DNA (ssDNA), double stranded DNA (ddDNA) and chromatin. Dnase is activated by bivalent metals such as Mg<sup>2+</sup> and Ca<sup>2+</sup>.

Dnase enzymes are common reagents used in biochemical methods requiring digestion of DNA and recovery of RNA, or where DNA is to be removed without affecting structural proteins or enzymes. Dnase enzymes are also used in tissue culture to digest DNA from damaged cells, resulting in reduced viscosity, and for removal of membrane-bound DNA fragments.

Synonym Names for DNase Human protein: N/A; EC 3.1.21.1, Deoxyribonuclease I, DNase I, Dornase alfa, DNL1, DRNI, FLJ38093.

**Source of Antigen and Antibodies**

Deoxyribonuclease I Human Recombinant produced in CHO is a glycosylated, polypeptide chain containing 260-amino acids and having a total molecular mass of 37,000 Dalton with a molecular formula of C<sub>1321</sub>H<sub>1995</sub>O<sub>396</sub>S<sub>9</sub>. DNase is purified by proprietary chromatographic techniques.

**Physical Appearance:** Sterile liquid colorless solution at a concentration of 1mg/ml.

**Unit Definition:** Dnase is generally assayed according to the photometric method developed by Kunitz (see Kunitz, M., Journal of General Physiology, vol 33, p.349 and 363, 1950). One Dnase unit results in an increase in absorbance at 260nm of 0.001/minute at 25 C when acting upon highly polymerized solution of DNA at pH-5. Also 0.005 Kunitz unit digests 1ug of lambda phage DNA in 10 minutes at 37 C in 50mM Tris, 1mMMg<sup>++</sup>, pH 7.8 in a 50ul reaction.

**Source:** CHO Cells

**Format:** Each mg contains 150 ug calcium chloride dehydrate and 8.77 mg NaCl.

**Stability:** 2 years when stored at 4 C, three weeks at 15 C, pH-6.3.

**Shipping:** Products may be shipped on ice pack or dry ice.

\*This product is for In vitro research use only.

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**Related material available from ADI**

Antibodies to MGMT, hNTH, DNase, XRCC1, hOGG1, etc are available.

Anti-Rabbit IgG-HRP Conjugate and ECL Reagents

**Western Blot Recycling Kit (Strips blots in 5 minutes)** and re-use the same blot with multiple antibodies

DNASE15-R-100

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