

Product Specification Sheet

Human Deoxyribonuclease 1 (DNase 1) Protein

Cat # DNASE12-C Recombinant human DNase 1 protein Western blot positive control **SIZE:** 100 ul

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⁺² and Ca⁺².

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 C₁₃₂₁H₁₉₉₅O₃₉₆S₉. DNase is purified by proprietary chromatographic techniques.

Recombinant purified human DNase1 protein for WB +ve control (**Cat # DNASE12-C**) is supplied in SDS-PAGE sample buffer (reduced). Load 10 ul/lane of **DNASE12-C** for good visibility with appropriate antibodies. Store at –20oC in suitable size aliquots. SDS may crystallize in cold conditions. It should redissolve by warming before taking it from the stock. It should be heated once prior to loading on gels. If the product has been stored for several weeks, then it may be preferable to add 5 ul of fresh 2x sample buffer per 10 ul of the **DNASE12-C** solution prior to heating and loading on gels. This preparation is not biologically active. It is not suitable for ELISA or other applications where native protein is required. Do not freeze, thaw, or heat repeatedly.

ADI also had another preparation (# DNASE15-R-100) of recombinant human DNase-1 that is supplied in a buffer to maintain biological activity.

Form & Storage of Antibodies/Peptide Control

WB + Protein Controls

100 ul solution
Buffer: SDS-PAGE sample buffer (reduced)

Storage

Short-term: unopened, undiluted vials for less than a week at 4oC.

Long-term: at –20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at –20oC or below.

Shipping: 4oC for solutions and room temp for powder.

*This product is for In vitro research use only.

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

DNASE12-C 80630A