

Anti-DNase II (CT)

CATALOG No.: PX025A
PX025B

SIZE: 100 µg
0.5 mg

BACKGROUND:

Apoptosis is characterized by several morphological nuclear changes including chromatin condensation and nuclear fragmentation. These changes are triggered by the activation of members of caspase family, caspase activated DNase, and several novel proteins including AIF and Acinus (1). DNase II causes both chromatin condensation and DNA fragmentation (1). The genes encoding human (2-4), porcine (4), and murine (5) DNase II have been cloned. The DNase II gene encodes a 40 kDa proenzyme. The mature enzyme consists of two non-identical subunits, the 32 kDa (α) and 12 kDa (β) chains, generated by proteolytic processing. Overexpression of DNase II induces chromatin condensation (3). DNase II is ubiquitously expressed in human tissues.

SOURCE:

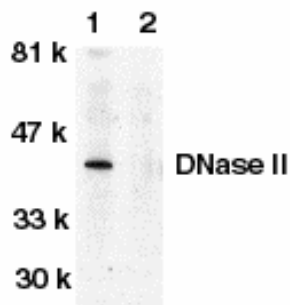
Rabbit anti-DNase II (CT) polyclonal antibody was raised against a peptide corresponding to amino acids 347 to 360 of human DNase II precursor (2-4).

APPLICATION:

This polyclonal antibody can be used for detection of DNase II expression by Western blot at 1:500 to 1:1000 dilution. Human spleen tissue lysate or THP-1 cell lysate can be used as positive control and an approximate 40 kDa band can be detected, which represents the pro-enzyme of DNase II. For research use only.

STORAGE:

It is supplied as immunoaffinity chromatography purified IgG, 100 µg in 200 µl of PBS containing 0.02% sodium azide. Store at 4°C, stable for one year.



Western blot analysis of DNase II in human spleen tissue lysate in the absence (lane 1) or presence (lane 2) of blocking peptide with anti-DNase II (CT) at 1:500 dilution.

REFERENCES:

1. Zamzami N, Kroemer G. Condensed matter in cell death. *Nature* 1999;401:127-8
2. Yasuda T, Takeshita H, Iida R, Nakajima T, Hosomi O, Nakashima Y, Kishi K. Molecular cloning of the cDNA encoding human deoxyribonuclease II. *J Biol Chem* 1998;273:2610-6
3. Krieser RJ, Eastman A. The cloning and expression of human deoxyribonuclease II. A possible role in apoptosis. *J Biol Chem* 1998;273:30909-14
4. Shiokawa D, Tanuma S. Cloning of cDNAs encoding porcine and human DNase II. *Biochem Biophys Res Commun* 1998;247:864-9
5. Baker KP, Baron WF, Henzel WJ, Spencer SA. Molecular cloning and characterization of human and murine DNase II. *Gene* 1998;215:281-9

CAUTION: NOT FOR USE IN HUMANS. FOR RESEARCH PURPOSES ONLY.



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