

# DNASE1L3

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## Abstract

This gene encodes a member of the DNase family. The protein hydrolyzes DNA, is not inhibited by actin, and mediates the breakdown of DNA during apoptosis. Alternate transcriptional splice variants of this gene have been observed but have not been thoroughly characterized.

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## Document

DNASE1L3 gene encodes a member of the DNase family. The protein hydrolyzes DNA, is not inhibited by actin, and mediates the breakdown of DNA during apoptosis. A study has found that DNASE1L3 normally digests DNA in microparticles released from cell disruption. In the absence of DNASE1L3, it causes DNA accumulation in vivo, which triggers immune cells to produce antibodies. And when antibodies combine with DNA to form complexes into the arterial wall or tissue causing inflammation and leading to autoimmune diseases such as lupus erythematosus. This provides a potential way to develop a new drug, including DNASE1L3 as a drug.