

DNASE1L1 (I-14): sc-68474

BACKGROUND

DNASE1L1 (deoxyribonuclease I-like 1), also known as XIB, DNL1L or DNA-SEX, is a 302 amino acid protein that localizes to the endoplasmic reticulum and belongs to the deoxyribonuclease family. Expressed at high levels in cardiac and skeletal muscle and at lower levels in a variety of tissues throughout the body, DNASE1L1 exists as multiple alternatively spliced isoforms and is thought to function in a similar manner to DNase I, possibly mediating internucleosomal DNA degradation via catalytic cleavage events. The gene encoding DNASE1L1 maps to human chromosome X, which contains nearly 153 million base pairs and houses over 1,000 genes. In conjunction with chromosome Y, chromosome X is responsible for sex determination. There are a number of conditions related to an abnormal number and combination of sex chromosomes, some of which include Turner's syndrome, color blindness, hemophilia and Duchenne muscular dystrophy.

REFERENCES

1. Parrish, J.E., et al. 1995. A muscle-specific DNase I-like gene in human Xq28. *Hum. Mol. Genet.* 4: 1557-1564.
2. Coy, J.F., et al. 1996. Isolation, differential splicing and protein expression of a DNase on the human X chromosome. *Cell Death Differ.* 3: 199-206.
3. Pergolizzi, R., et al. 1996. Cloning of a gene encoding a DNase I-like endonuclease in the human Xq28 region. *Gene* 168: 267-270.
4. Rodriguez, A.M., et al. 1997. Identification, localization, and expression of two novel human genes similar to deoxyribonuclease I. *Genomics* 42: 507-513.
5. Online Mendelian Inheritance in Man, OMIM™. 1997. Johns Hopkins University, Baltimore, MD. MIM Number: 300081. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
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CHROMOSOMAL LOCATION

Genetic locus: DNASE1L1 (human) mapping to Xq28; Dnase1l1 (mouse) mapping to X A7.3.

SOURCE

DNASE1L1 (I-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of DNASE1L1 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-68474 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

DNASE1L1 (I-14) is recommended for detection of DNASE1L1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

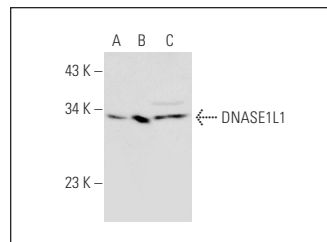
DNASE1L1 (I-14) is also recommended for detection of DNASE1L1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for DNASE1L1 siRNA (h): sc-77165, DNASE1L1 shRNA Plasmid (h): sc-77165-SH and DNASE1L1 shRNA (h) Lentiviral Particles: sc-77165-V.

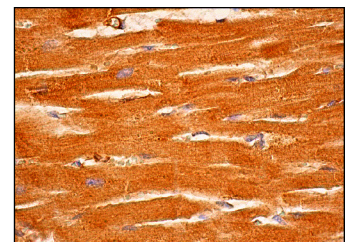
Molecular Weight of DNASE1L1: 34 kDa.

Positive Controls: KNRK whole cell lysate: sc-2214, Neuro-2A whole cell lysate: sc-364185 or A549 cell lysate: sc-2413.

DATA



DNASE1L1 (I-14): sc-68474. Western blot analysis of DNASE1L1 expression in KNRK (A), Neuro-2A (B) and A549 (C) whole cell lysates.



DNASE1L1 (I-14): sc-68474. Immunoperoxidase staining of formalin fixed, paraffin-embedded human heart muscle tissue showing cytoplasmic staining of myocytes.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

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Try **DNASE1L1 (KK-M3): sc-134320**, our highly recommended monoclonal alternative to DNASE1L1 (I-14).