



LINE-1 (H-110): sc-67197

BACKGROUND

Mammalian LINE-1 (L1) elements belong to the superfamily of autonomously replicating retrotransposable elements that lack the long terminal repeated (LTR) sequences typical of retroviruses and retroviral-like retrotransposons. The non-LTR superfamily is ubiquitous in nature and constitutes 20% or more of some mammalian genomes and about 5% of the human genome. Therefore, LINE-1 elements presumably have had a profound, perhaps defining, effect on the evolution, structure and function of mammalian genomes. LINE-1 elements contain regulatory signals and encode two proteins: an RNA-binding protein and an integrase-primase, as the retrovirus harbors both endonuclease and reverse transcriptase capabilities.

REFERENCES

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STORAGE

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

SOURCE

LINE-1 (H-110) is a rabbit polyclonal antibody raised against amino acids 1081-1190 mapping near the C-terminus of LINE-1 of human origin.

PRODUCT

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

APPLICATIONS

LINE-1 (H-110) is recommended for detection of LINE-1 of 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of LINE-1: 147 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

SELECT PRODUCT CITATIONS

- Montoya-Durango, D.E., Liu, Y., Teneng, I., Kalbfleisch, T., Lacy, M.E., Steffen, M.C. and Ramos, K.S. 2009. Epigenetic control of mammalian LINE-1 retrotransposon by retinoblastoma proteins. *Mutat. Res.* 665: 20-28.

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.