



XRN2 (h): 293T Lysate: sc-173007

BACKGROUND

Degradation of mRNA is a critical aspect of gene expression that occurs via the exoribonuclease. Exoribonuclease 2 (XRN2) is the human homologue of the *Saccharomyces cerevisiae* RAT1, which functions as a nuclear 5' to 3' exoribonuclease and is essential for mRNA turnover and cell viability. XRN2 also processes rRNAs and small nucleolar RNAs (snoRNAs) in the nucleus. XRN2 moves along with RNA polymerase II and gains access to the nascent RNA transcript after the endonucleolytic cleavage at the poly(A) site or at a second cotranscriptional cleavage site (CoTC). CoTC is an autocatalytic RNA structure that undergoes rapid self-cleavage and acts as a precursor to termination by presenting a free RNA 5' end to be recognized by XRN2. XRN2 then travels in a 5'-3' direction like a guided torpedo and facilitates the dissociation of the RNA polymerase elongation complex.

REFERENCES

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STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: XRN2 (human) mapping to 20p11.23.

PRODUCT

XRN2 (h): 293T Lysate represents a lysate of human XRN2 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

XRN2 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive XRN2 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

RESEARCH USE

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