SANTA CRUZ BIOTECHNOLOGY, INC.

Int-6 (h2): 293T Lysate: sc-176131

SANTA CRUZ BIOTECHNOLOGY
The Power to Question

BACKGROUND

Int-6, also designated eIF3ε, eIF3-p46, eIF3-p48 and eukaryotic translation initiation factor 3, subunit 6, regulates translation and protein degradation through binding with three complexes: the eukaryotic translation initiation factor 3 (eIF3), the proteasome regulatory lid and the constitutive photomorphogenesis 9 signalosome. eIF3 is a complex that mediates assembly of 40S ribosomal subunits on mRNA bearing either a 5'-cap or an internal ribosome entry site (IRES). The Int-6 gene is a site of mouse mammary tumor virus (MMTV) integration in murine tumors. Reducing Int-6 expression by RNA interference in HeLa cells alters mitosis progression through defects in spindle formation, chromosome segregation and cytokinesis. These abberations appear to correlate with an inhibition of cyclin B-Cdk1 kinase activity due to a protracted inhibitory phosphorylated state of Cdk1.

REFERENCES

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4. Morris-Desbois, C., et al. 2001. The human protein HSPC021 interacts with Int-6 and is associated with eukaryotic translation initiation factor 3. J. Biol. Chem. 276: 45988-45995.
5. Rasmussen, S.B., et al. 2001. Evidence for the transforming activity of a truncated Int-6 gene, *in vitro*. Oncogene 20: 5291-5301.
6. Yen, H.C., et al. 2003. Int-6—a link between the proteasome and tumorigenesis. Cell Cycle 2: 81-83.
7. von Arnim, A.G., et al. 2003. Protein homeostasis: a degrading role for Int-6/eIF3ε. Curr. Biol. 13: R323-R325.
8. Watkins, S.J., et al. 2004. Cell cycle-related variation in subcellular localization of eIF3ε/Int-6 in human fibroblasts. Cell Prolif. 37: 149-160.
9. Morris, C., et al. 2005. Silencing of human Int-6 impairs mitosis progression and inhibits cyclin B-Cdk1 activation. Oncogene 24: 1203-1211.

CHROMOSOMAL LOCATION

Genetic locus: EIF3S6 (human) mapping to 8q23.1.

PRODUCT

Int-6 (h2): 293T Lysate represents a lysate of human Int-6 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

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.

APPLICATIONS

Int-6 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive Int-6 antibodies. Recommended use: 10-20 µl per lane.

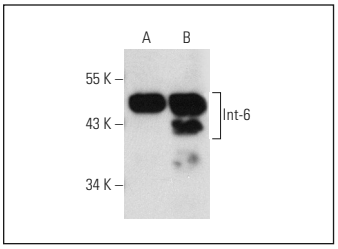
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Int-6 (A-11): sc-133251 is recommended as a positive control antibody for Western Blot analysis of enhanced human Int-6 expression in Int-6 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



Int-6 (A-11): sc-133251. Western blot analysis of Int-6 expression in non-transfected: sc-117752 (**A**) and human Int-6 transfected: sc-176131 (**B**) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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