SANTA CRUZ BIOTECHNOLOGY, INC.

Int-6 (H-200): sc-28859

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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3. Guo, J., et al. 2000. Characterization of the interaction between the interferon-induced protein P56 and the Int-6 protein encoded by a locus of insertion of the mouse mammary tumor virus. J. Virol. 74: 1892-1899.
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.

CHROMOSOMAL LOCATION

Genetic locus: EIF3E (human) mapping to 8q23.1; Eif3e (mouse) mapping to 15 B3.2.

SOURCE

Int-6 (H-200) is a rabbit polyclonal antibody raised against amino acids 246-445 mapping at the C-terminus of Int-6 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

Int-6 (H-200) is recommended for detection of Int-6 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

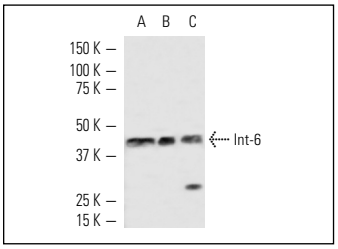
Int-6 (H-200) is also recommended for detection of Int-6 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Int-6 siRNA (h): sc-40561, Int-6 siRNA (m): sc-40562, Int-6 shRNA Plasmid (h): sc-40561-SH, Int-6 shRNA Plasmid (m): sc-40562-SH, Int-6 shRNA (h) Lentiviral Particles: sc-40561-V and Int-6 shRNA (m) Lentiviral Particles: sc-40562-V.

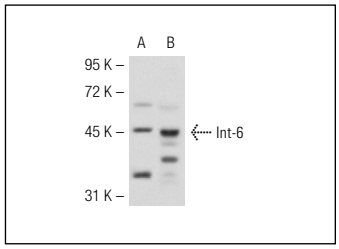
Molecular Weight of Int-6: 48 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, NIH/3T3 whole cell lysate: sc-2210 or KNRK whole cell lysate: sc-2214.

DATA



Int-6 (H-200): sc-28859. Western blot analysis of Int-6 expression in Jurkat (**A**), LADMAC (**B**) and NIH/3T3 (**C**) whole cell lysates.



Int-6 (H-200): sc-28859. Western blot analysis of Int-6 expression in 293T (**A**) and KNRK (**B**) whole cell lysates.

STORAGE

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

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.