

Int-6 (A-1): sc-74506

BACKGROUND

Int-6, also designated eIF3e, 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 tumour 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 aberrations 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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- 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.
- 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.
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- von Arnim, A.G., et al. 2003. Protein homeostasis: a degrading role for Int-6/eIF3e. *Curr. Biol.* 13: R323-R325.

CHROMOSOMAL LOCATION

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

SOURCE

Int-6 (A-1) is a mouse monoclonal antibody raised against amino acids 246-445 mapping at the C-terminus of Int-6 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

Int-6 (A-1) is recommended for detection of Int-6 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for Int-6 siRNA (h): sc-40561, Int-6 siRNA (m): sc-40562, Int-6 siRNA (r): sc-270194, Int-6 shRNA Plasmid (h): sc-40561-SH, Int-6 shRNA Plasmid (m): sc-40562-SH, Int-6 shRNA Plasmid (r): sc-270194-SH, Int-6 shRNA (h) Lentiviral Particles: sc-40561-V, Int-6 shRNA (m) Lentiviral Particles: sc-40562-V and Int-6 shRNA (r) Lentiviral Particles: sc-270194-V.

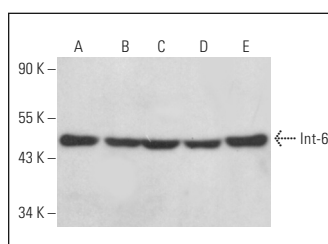
Molecular Weight of Int-6: 48 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, NIH/3T3 whole cell lysate: sc-2210 or CCRF-CEM cell lysate: sc-2225.

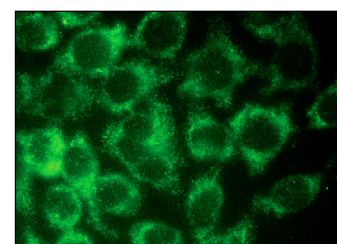
RECOMMENDED SUPPORT REAGENTS

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Int-6 (A-1): sc-74506. Western blot analysis of Int-6 expression in NIH/3T3 (A), HeLa (B), CCRF-CEM (C), Caki-1 (D) and 3611-RF (E) whole cell lysates.



Int-6 (A-1): sc-74506. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

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.