SANTA CRUZ BIOTECHNOLOGY, INC.

KNL2 (G-14): sc-162605

BACKGROUND

C79407 (expressed sequence C79407), also known as kinetochore-associated protein KNL2 homolog, Mis18-binding protein 1, Kiaa1903 or M18bp1, is a 998 amino acid protein that is required during CENP-A recruitment. Localizing to nucleus and centromeres, C79407 plays a role in chromosome segregation during mitosis where it associates with chromatin and centromeres in interphase cells. C79407 contains one SANT domain and forms a complex with OIP5, Sp1, FASP1, C14orf106, RbAp46 and RbAp48. C79407 exists as three alternatively spliced isoforms that are encoded by a gene that maps to mouse chromosome 12 C1.

REFERENCES

1. Carninci, P. and Hayashizaki, Y. 1999. High-efficiency full-length cDNA cloning. Meth. Enzymol. 303: 19-44.
2. Carninci, P., et al. 2000. Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new genes. Genome Res. 10: 1617-1630.
3. Stryke, D., et al. 2003. BayGenomics: a resource of insertional mutations in mouse embryonic stem cells. Nucleic Acids Res. 31: 278-281.
4. Hansen, J., et al. 2003. A large-scale, gene-driven mutagenesis approach for the functional analysis of the mouse genome. Proc. Natl. Acad. Sci. USA 100: 9918-9922.
5. Zambrowicz, B.P., et al. 2003. Wnk1 kinase deficiency lowers blood pressure in mice: a gene-trap screen to identify potential targets for therapeutic intervention. Proc. Natl. Acad. Sci. USA 100: 14109-14114.
6. Katayama, S., et al. 2005. Antisense transcription in the mammalian transcriptome. Science 309: 1564-1566.

CHROMOSOMAL LOCATION

Genetic locus: KNL2 (mouse) mapping to 12 C1.

SOURCE

KNL2 (G-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of KNL2 of mouse origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-162605 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-162605 X, 200 µg/0.1 ml.

STORAGE

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

APPLICATIONS

KNL2 (G-14) is recommended for detection of KNL2 of mouse and rat 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).

Suitable for use as control antibody for KNL2 siRNA (m): sc-141932, KNL2 shRNA Plasmid (m): sc-141932-SH and KNL2 shRNA (m) Lentiviral Particles: sc-141932-V.

KNL2 (G-14) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

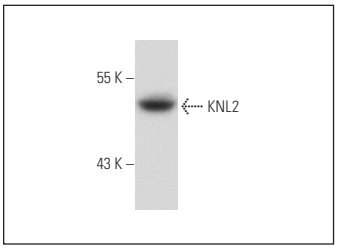
Molecular Weight of KNL2 isoforms: 114/49 kDa.

Positive Controls: mouse brain extract: sc-2253 or FOX-NY whole cell lysate.

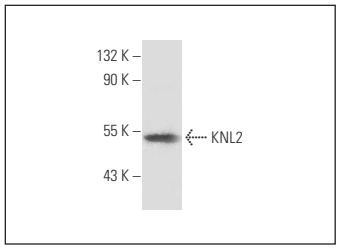
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



KNL2 (G-14): sc-162605. Western blot analysis of KNL2 expression in FOX-NY whole cell lysate.



KNL2 (G-14): sc-162605. Western blot analysis of KNL2 expression in mouse brain tissue extract.

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.