

KIN17 (K36): sc-32768**BACKGROUND**

The KIN17 protein binds to bent or curved double-stranded DNA fragments found at illegitimate recombination sites. KIN17 is ubiquitously expressed, with the highest levels of expression in muscle, heart and testis. Low doses of ionizing radiation increase KIN17 expression in mammalian cells. In keratinocytes, KIN17 expression increases during periods of hyperproliferation. UVC irradiation also increases KIN17 expression when functional XPA and XPC proteins are present. Antisense studies indicate that a decrease in KIN17 correlates with a decrease in cell proliferation and an accumulation of cells in early and mid-S phase. SV40-transformed fibroblasts overexpress KIN17, which interacts with large T antigen and reduces T antigen-dependent DNA replication. The gene encoding human KIN17 maps to chromosome 10p14.

CHROMOSOMAL LOCATION

Genetic locus: KIN (human) mapping to 10p14; Kin (mouse) mapping to 2 A1.

SOURCE

KIN17 (K36) is a mouse monoclonal antibody recognizes a protein sequence stretching over the carboxy terminus of human KIN17 protein.

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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-32768 X, 200 µg/0.1 ml.

KIN17 (K36) is available conjugated to either phycoerythrin (sc-32768 PE) or fluorescein (sc-32768 FITC), 200 µg/ml, for IF, IHC(P) and FCM.

STORAGE

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

APPLICATIONS

KIN17 (K36) is recommended for detection of KIN17 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10⁶ cells).

Suitable for use as control antibody for KIN17 siRNA (h): sc-45958, KIN17 siRNA (m): sc-45959, KIN17 shRNA Plasmid (h): sc-45958-SH, KIN17 shRNA Plasmid (m): sc-45959-SH, KIN17 shRNA (h) Lentiviral Particles: sc-45958-V and KIN17 shRNA (m) Lentiviral Particles: sc-45959-V.

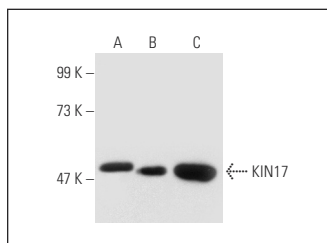
KIN17 (K36) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of KIN17: 45 kDa.

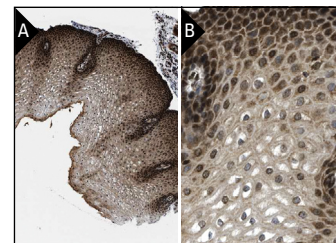
Positive Controls: KIN17 (m): 293T Lysate: sc-127043, Jurkat whole cell lysate: sc-2204 or RKO whole cell lysate: sc-364793.

RECOMMENDED SUPPORT REAGENTS

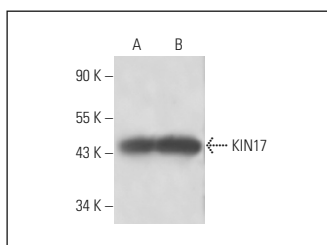
To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western 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. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA

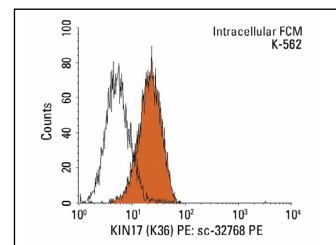
KIN17 (K36): sc-32768. Western blot analysis of KIN17 expression in non-transfected 293T: sc-117752 (A), mouse KIN17 transfected 293T: sc-127043 (B) and Jurkat (C) whole cell lysates.



KIN17 (K36): sc-32768. Immunoperoxidase staining of formalin fixed, paraffin-embedded human esophagus tissue showing nuclear and cytoplasmic staining of squamous epithelial cells at low (A) and high (B) magnification. Kindly provided by The Swedish Human Protein Atlas (HPA) program.



KIN17 (K36): sc-32768. Western blot analysis of KIN17 expression in HCT 116 (A) and RKO (B) whole cell lysates.



KIN17 (K36) PE: sc-32768 PE. Intracellular FCM analysis of fixed and permeabilized K-562 cells. Black line histogram represents the isotype control, normal mouse IgG₁-PE: sc-2866.

SELECT PRODUCT CITATIONS

- Ramos, A.C., et al. 2015. The kin17 protein in murine melanoma cells. *Int. J. Mol. Sci.* 16: 27912-27920.

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.